

San Diego Integrated Regional Water Management

2015 IRWM Implementation Grant Proposal

Budget

Attachment 4 consists of the following items:

- ✓ **Budget.** This attachment includes a summary of the budget for the entire Proposal, as well as the budgets for each individual project included within the Proposal.

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Introduction

This *2015 IRWM Implementation Grant Proposal* includes thirteen high-priority projects that were evaluated and recommended by a working group of the Regional Advisory Committee (RAC), the primary stakeholder body for the San Diego IRWM Program. The local project sponsors (LPS) that will be implementing these projects have completed substantial work associated with each project. As such, the budgets provided herein are considered reasonable based on currently available information and the experience of San Diego County Water Authority (SDCWA), the LPS, and their project partners.

This attachment contains a roll-up budget of the entire Proposal consistent with Table 9 of the *2015 PSP* as well as project budget tables for each project consistent with Table 8 of the *2015 PSP*. The tasks and information provided for each project are consistent with project-related information provided in *Attachment 3 Work Plan* and *Attachment 5 Schedule*.

Proposal Budget Summary

Table 4-1 includes the Proposal Budget Summary consistent with Table 9 of the 2015 PSP. As shown in **Table 4-1**, the total local cost-share (funding match) for the Proposal is 47%. No disadvantaged community (DAC) waivers are being requested for the thirteen projects included within the Proposal.

Table 4-1: Proposal Budget Summary for San Diego 2015 IRWM Implementation Grant Proposal

Individual Project Title		(a)	(b)	(c)	(d)	(e)
		Requested Grant Amount	Cost Share: Non-State Fund Source (Funding Match)	Cost Share: Other State Fund Source	Total Cost	% Funding Match
(GA)	Grant Administration	\$933,943	\$0	\$0	\$933,943	0%
(1)	Regional Drought Resiliency Program	\$3,800,000	\$1,614,780	\$508,432	\$5,923,212	27%
(2)	Conservation Home Makeover in the Chollas Creek Watershed	\$542,000	\$0	\$0	\$542,000	0%
(3)	San Diego Water Conservation Program	\$866,000	\$437,344	\$0	\$1,303,344	34%
(4)	Ms. Smarty-Plants Grows Water-Wise Schools	\$652,000	\$157,750	\$0	\$809,750	19%
(5)	Rural Disadvantaged Community Partnership Project – Phase III	\$3,000,000	\$2,027,350	\$0	\$5,027,350	40%
(6)	Integrated Water Resource Solutions for the Carlsbad Watershed	\$2,500,000	\$9,102,322	\$0	\$11,602,322	78%
(7)	UCSD Water Conservation and Watershed Protection	\$1,435,000	\$1,723,716	\$0	\$3,158,716	55%
(8)	Escondido Advanced Water Treatment for Agriculture	\$2,000,000	\$17,587,769	\$0	\$19,587,769	90%
(9)	Padre Dam Advanced Water Treatment – Phase IA Expansion	\$6,000,000	\$9,182,247	\$21,106,300	\$36,288,547	25%
(10)	Safari Park Drought Response and Outreach	\$2,900,000	\$967,000	\$0	\$3,867,000	25%
(11)	San Diego River Healthy Headwaters Restoration	\$2,116,000	\$929,000	\$0	\$3,045,000	31%
(12)	Sweetwater Reservoir Wetlands Habitat Recovery	\$1,500,000	\$1,723,629	\$0	\$3,223,629	53%
(13)	Hodges Reservoir Natural Treatment System	\$2,886,472	\$964,408	\$0	\$3,850,880	25%
Proposal Total		\$31,131,415	\$46,417,315	\$21,614,732	\$99,163,462	47%
DAC Funding Match Waiver Total		\$0	\$0	\$0	\$0	-
Grand Total		\$31,131,415	\$46,417,315	\$21,614,732	\$99,163,462	47%

Project Budgets

Project budget summaries for each of the thirteen projects included in this Proposal are provided in the following sections. Table 8 in the 2015 PSP has been completed for each project, and a two-page description that describes how the budgets are reasonable based on current available information is provided for each project. Please note that Grant Administration is included here as a separate “project”. Note that for some deliverables/activities, costs were rolled up due to page limitations, and a range of hourly rates/unit costs is provided. For these items, the number of hours/units is the total hours/units across all ranges, and the total cost is not the product of hourly rate/unit cost times number of hours/units, but rather the unit cost multiplied by the number of units for each sub-category that was rolled up. These budget descriptions are within the page limits allowed in the 2015 PSP.

Grant Administration

Grant Administrator: San Diego County Water Authority (SDCWA)

Partners: Local Project Sponsors (Padre Dam Municipal Water District, Zoological Society of San Diego, City of Escondido, San Elijo Joint Powers Authority, University of California San Diego, Groundwork San Diego, City of San Diego, The Water Conservation Garden, Rural Community Assistance Corporation, USDA Forest Service, and Sweetwater Authority)

A project summary budget table consistent with a modified Table 8 in the 2015 PSP is provided below as **Table 4-2** for Grant Administration by SDCWA for this 2015 IRWM Implementation Grant Proposal.

Table 4-2: Total Project Budget for Grant Administration

Proposal Title: San Diego 2015 IRWM Implementation Grant Proposal					
Project Title: Grant Administration					
Project serves a need of a DAC?:		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		
Funding Match Waiver request?:		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		
		(a)	(b)	(c)	(d)
	Category	Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Sources*	Total
(a)	Direct Project Administration	\$933,943	\$0	\$0	\$933,943
	Task 1: Agreement Administration	\$127,701	\$0	\$0	\$127,701
	Task 2: Invoicing	\$398,880	\$0	\$0	\$398,880
	Task 3: Progress Reports and Project Completion Reports	\$407,362	\$0	\$0	\$407,362
(f)	Grand Total	\$933,943	\$0	\$0	\$933,943
*List sources of funding: No funding match is being provided for Grant Administration. Grant Administration will be funded entirely through grant dollars.					

Row (a) Direct Project Administration

SDCWA has extensive experience administering IRWM grants on behalf of the San Diego IRWM Region. Based on this experience, 3% of the grant request (\$933,943) has been set aside for grant administration by SDCWA. An explanation of costs associated with each task is provided below, along with hourly rates and an estimate of hours to complete each task. Note that some variation may occur due to rounding.

Task 1: Agreement Administration

Cost break down for this task is provided in the table below. The cost is calculated as the level of effort to execute the grant agreement with DWR, and the level of effort to execute each individual LPS contracts, based on SDCWA's experience in previous rounds. The Grant Administrator and Management Analyst each require 80 hours for DWR Grant Administration (contracting and coordination with DWR). The Grant Administrator requires approximately 32 hours per agreement to administer LPS agreements, facilitating LPS meetings, attending RAC and RWMG meetings, and administering other grant compliance requirements, with the Management Analyst

spending approximately 25 hours per LPS agreement. Total hours for the Grant Administrator for this task is 500 hours, and total hours for the Management Analyst is 400 hours. The IRWM Program Manager will spend a total of 100 hours reviewing the Grant Agreement and the LPS agreements, as well as attending meetings with DWR and LPS, as necessary. This task also includes webtool developer labor and supplies, which will allow LPS to submit grant compliance materials to SDCWA's grant administrator, and labor compliance evaluation services. IT staff will provide 300 hours of webtool development services, with actual materials and supplies for the webtool up to \$12,101. Labor compliance evaluation will require 40 hours of consultant time at \$200/hour, based on historical contracts. Hourly rates are based on salary and benefits, and represent an average rate anticipated over the grant administration period (2016-2020).

Table 4-3: Task 1 Costs for Grant Administration

Discipline / Activity	Hourly Rate	Number of Hours	Total Cost
<i>Task 1: Agreement Administration</i>			\$127,701
Grant Administrator	\$82	500	\$41,000
Management Analyst	\$74	400	\$29,600
IT Staff/Services	\$90	300	\$27,000
IRWM Program Manager	\$100	100	\$10,000
LPS Labor Compliance Evaluation Services	\$200	40	\$8,000
Webtool Development	Materials and Supplies		\$12,101

Task 2: Invoicing

Costs associated with invoicing include the time required to coordinate with LPS staff to obtain invoices, review each invoice packet from LPS, compile LPS invoices into DWR's invoice packet, review invoices for accuracy and adequacy for Grant Agreement criteria, and revise inadequate invoice packets. Based on SDCWA's grant administration experience, the Grant Administrator will require 2,240 hours (112 hours per quarter) to process and manage Invoice Packets for 13 LPS on a quarterly basis. The Management Analyst will require approximately 2,800 hours (140 hours per quarter) to work with 13 LPS to successfully meeting invoicing requirements for DWR. The IRWM Program Manager will spend a total of 80 hours (4 hours per quarter) overseeing invoicing efforts. The grant will be administered for five year (2016-2020) for a total of 20 invoice submittals on a quarterly basis.

Table 4-4: Task 2 Costs for Grant Administration

Discipline / Activity	Hourly Rate	Number of Hours	Total Cost
<i>Task 2: Invoicing</i>			\$398,880
Grant Administrator	\$82	2,240	\$183,680
Management Analyst	\$74	2,800	\$207,200
IRWM Program Manager	\$100	80	\$8,000

Task 3: Progress Reports and Project Completion Reports

Cost break down for preparation of quarterly project progress reports and project completion reports is provided in the table below. Based on SDCWA's grant administration experience, the Grant Administrator will require 2,800 hours (120 hours per quarter) over the grant contract period to administer and manage quarterly project progress reports and project completion reports from 13 LPS, as well as the Grant Program completion report. The Management Analyst will require approximately 2,240 hours (112 hours per quarter) to work with LPS and the Grant Administrator to process and manage progress reports for 13 LPS and their project completion reports, and to assist the Grant Administrator in preparing the Grant Program completion report. This task includes the necessary effort to work with LPS to develop and process any necessary amendments. The IRWM Program Manager will spend 120 hours (6 hours per quarter) overseeing project reporting efforts. The grant will be administered for five year (2016-2020) for a total of 20 progress report submittals.

Table 4-5: Task 3 Costs for *Grant Administration*

Discipline	Hourly Rate	Number of Hours	Total Cost
<i>Task 3: Progress Reports and Project Completion Reports</i>			\$407,362
Grant Administrator	\$80	2,800	\$229,600
Assistant Management Analyst	\$40	2,240	\$165,762
IRWM Program Manager	\$100	120	\$12,000

Conservation Program

Project 1: Regional Drought Resiliency Program

Local Project Sponsor: San Diego County Water Authority

Partners: California Department of Corrections and Rehabilitation (CDCR), Otay Water District, and Mission Resources Conservation District (MRCD)

A project summary budget table consistent with Table 8 in the 2015 PSP is provided below as **Table 4-6** for the *Regional Drought Resiliency Program* project. Note some difference may occur due to rounding. This project has a 27% funding match.

Table 4-6: Total Project Budget for Regional Drought Resiliency Program

Proposal Title: San Diego 2015 IRWM Implementation Grant Proposal					
Project Title: Regional Drought Resiliency Program					
Project serves a need of a DAC?:		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Funding Match Waiver request?:		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		
		(a)	(b)	(c)	(d)
	Category	Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Sources*	Total
(a)	Direct Project Administration	\$74,498	\$0	\$0	\$74,498
	Task 1: Project Management	\$56,458	\$0	\$0	\$56,458
	Task 2: Labor Compliance Program	\$0	\$0	\$0	\$0
	Task 3: Reporting	\$18,040	\$0	\$0	\$18,040
(b)	Land Purchase/ Easement	\$0	\$0	\$0	\$0
	Task 4: Land Purchase	\$0	\$0	\$0	\$0
(c)	Planning/ Design/ Environmental	\$0	\$9,020	\$0	\$9,020
	Task 5: Feasibility Studies	\$0	\$0	\$0	\$0
	Task 6: CEQA Documentation	\$0	\$0	\$0	\$0
	Task 7: Permitting	\$0	\$0	\$0	\$0
	Task 8: Design	\$0	\$0	\$0	\$0
	Task 9: Project Performance Monitoring Plan	\$0	\$9,020	\$0	\$9,020
(d)	Construction/ Implementation	\$3,725,502	\$1,605,760	\$508,432	\$5,839,694
	Task 10: Contract Services	\$0	\$5,760	\$0	\$5,760
	Task 11: Construction Administration	\$107,070	\$0	\$0	\$107,070
	Task 12: Construction/Implementation	\$3,618,432	\$1,600,000	\$508,432	\$5,726,865
	12.1: Correctional Facility Retrofit Project	\$565,976	\$0	\$508,432	\$1,074,408
	12.2: EC Mapping and Soil Moisture Sensor Systems	\$313,354	\$0	\$0	\$313,354
	12.3: WaterSmart Field Services Program	\$618,750	\$0	\$0	\$618,750
	12.4: Sustainable Landscapes Program	\$882,353	\$1,600,000	\$0	\$2,482,353
	12.5: WaterSmart Landscape Makeover Program	\$159,579	\$0	\$0	\$159,579
	12.6: Drought Outreach and Education	\$1,078,420	\$0	\$0	\$1,078,420
(e)	Grand Total	\$3,800,000	\$1,614,780	\$508,432	\$5,923,212
<p>*List sources of funding: Funding match for <i>Subtask 12.4</i> will be provided through a Turf Removal Rebate from Metropolitan Water District of Southern California, which has awarded \$1,619,302 for turf removal at the Rancho Santa Fe Golf Club. This will fund removal of 890,651 sq. ft. of turf, and was acquired through participation in the proposed project. The remaining funding match is provided as in-kind labor from SDCWA for <i>Tasks 9 and 10</i>. Other State Fund Sources for <i>Subtask 12.1</i> are the costs of installation at DCF, which will be completed by DCF staff (State employees).</p>					

Row (a) Direct Project Administration Costs

Task 1: Project Management

Costs for project administration include time to complete administrative duties, implement partnering agreements and coordinate with project partners, and compilation and submittal of deliverables. SDCWA staff will dedicate 717 hours to this task with staff rates ranging between \$60 and \$85 per hour, depending on discipline. These hourly rates include salary plus benefits, and do not include overhead costs.

Task 2: Labor Compliance Program (LCP)

Not applicable – none of the components are public works projects requiring an LCP.

Task 3: Reporting

Costs for reporting include 240 hours of SDCWA staff time to complete quarterly and final project reports at staff rates ranging between \$60 and \$85 per hour, depending on discipline. Rates include salary plus benefits.

Row (b) Land Purchase/ Easement

Task 4: Land Purchase

Not applicable – none of the components will require land acquisition.

Row (c) Planning/ Design/ Engineering/ Environmental Documentation

Task 5: Feasibility Studies

Not applicable – each of the components are extensions of existing programs that have proven successful at conserving water and affecting water use in SDCWA's service area. No additional feasibility studies are required.

Task 6: CEQA Documentation

Not applicable – none of the components require CEQA.

Task 7: Permitting

Not applicable - no permits are anticipated to be required.

Task 8: Design

Not applicable - the project expands existing programs and no additional design work is required.

Task 9: Project Performance Monitoring Plan

A Project Performance Monitoring Plan will be developed by SDCWA staff, at an estimated effort of 20 hours per component, for a total of 120 hours effort, at rates consistent with those for Task 1. Total cost is \$9,020.

Row (d) Construction/Implementation

Task 10: Contract Services

Costs associated with procuring contracts include time for SDCWA staff to issue an RFP and award a final contract for Component 6. This effort is estimated at 80 hours by a SDCWA Project Manager, at a rate of \$72 per hour, for a total cost of \$5,760. Components 1 through 5 are covered under existing contracts that govern the existing programs, and no additional costs will be incurred for contract procurement for those components.

Task 11: Construction Administration (Includes Subtasks 11.1 through 11.6)

Construction administration activities for Components 3, 4, 5, and 6 are incorporated into implementation activities in *Task 12 (Subtasks 12.3, 12.4, 12.5, and 12.6, respectively)*. Construction administration for Component 1 includes oversight of implementation and contractors, and coordination between contractor and DCF officials to ensure worker and prisoner safety during implementation. These efforts will involve a Project Manager and a Construction Manager for 347 hours each (\$152/hour), for a total cost of \$105,520 for *Subtask 11.1*. A Construction Manager will be responsible for conducting outreach to potential participants of Component 2 for 25 hours (\$63/hour), for a total cost of \$1,550 for *Subtask 11.2*. Total costs for *Task 11* are \$107,070.

Task 12: Construction/Implementation (Includes Subtasks 12.1 through 12.6)

Costs associated with implementation of *Task 12* are provided in **Table 4-7**. These costs are broken down by component, and further into incentives, equipment/materials, and labor, as applicable. Costs are based on executed Professional Services Agreements, estimates from vendors and contractors, rebate values in program guidelines, and experience gained from the existing programs.

Table 4-7: Task 12 Costs for Regional Drought Resiliency Program

	Deliverables/Activity	Hourly Rate/Unit Cost	Number of Hours/Units	Total Cost
Subtask 12.1 Correctional Facility Retrofit Project				\$1,074,408
	Electronic shower controls	\$600/unit	188 units	\$112,800
	Electronic faucet controls	\$375/unit	600 units	\$225,000
	Commercial toilets	\$750/unit	26 units	\$19,500
	Urinal flush valves	\$206/unit	4 units	\$823
	Flow reducers for faucets and aerators	\$185/unit	309 units	\$57,165
	High-efficient toilets	\$500/unit	267 units	\$133,500
	High-efficient urinals	\$250/unit	23 units	\$5,750
	Contingency	Approximately 2% of equipment costs		\$11,438
	Hardware and Fixture Installation – DCF Staff	\$43/hour	11,824 hours	\$508,432
Subtask 12.2 EC Mapping and Soil Moisture Sensor Systems				\$313,354
	Soil moisture sensor systems	\$1,000/system	200 systems	\$200,000
	Electrical conductivity mapping	\$45/hour	2,130 hours	\$95,854
	Site inspection	\$45/hour	389 hours	\$17,500
Subtask 12.3 WaterSmart Field Services Program				\$618,750
	Project Management	\$70-\$78/hour	2,227 hours	\$170,100
	Home Water Use Evaluation	\$18.50-\$62.50/unit	7,927 units	\$348,544
	Irrigation Checkup	\$156.50/unit	209 units	\$32,654
	Full Audit	\$328-\$513/unit	166 units	\$67,452
Subtask 12.4 Turf Replacement Program				\$2,482,353
	Turf Rebates	\$1.50/sq ft	470,588 sq ft	\$705,882
	Turf Rebates	\$2/sq ft	800,000 sq ft	\$1,600,000
	Rebate Program Administration	\$3,500/month + \$150/completed rebate		\$176,471
Subtask 12.5 WaterSmart Landscape Makeover Program				\$159,579
	Landscape Makeover Workshop Series	\$20,000/series	5 series	\$100,000
	Landscape Design for Homeowners	\$5,000/class	4 classes	\$20,000
	Landscape Makeover eLearning Module	\$3,958/module	10 modules	\$39,579
Subtask 12.6 Drought Outreach and Education				\$1,078,420
	Education Programs	\$30,000	Classroom materials	\$30,000
	Educational Materials	\$15,500	Printed materials	\$15,500
	Outreach Materials	\$1.48-\$3.40/item	24,000 items	\$60,520
	Education Programs	\$350-\$2,500 /program	185 programs	\$150,750
	Education Program Development	\$70/hour	209 hours	\$14,650
	Advertising	\$560,000	Paid media	\$560,000
	Develop Advertising and Translations	\$115,000	Creative production	\$115,000
	Educational Materials – Management	\$70-\$85/hour	563 hours	\$44,000
	Educational Materials – Production	Variable	Digital design and video production	\$38,000
	Research	\$50,000	Research	\$50,000
Task 12 Total				\$5,726,864

Project 2: Conservation Home Makeover in the Chollas Creek Watershed

Local Project Sponsor: Groundwork San Diego (Groundwork)

Partners: U.S. Green Building Council (USGBC) and San Diego Sustainable Living Institute (SDSLI)

A project summary budget table consistent with Table 8 in the 2015 PSP is provided below as **Table 4-8** for the *Conservation Home Makeover in the Chollas Creek Watershed* project. This project has a 0% funding match.

Table 4-8: Total Project Budget for Conservation Home Makeover in the Chollas Creek Watershed

Proposal Title: San Diego 2015 IRWM Implementation Grant Proposal					
Project Title: Conservation Home Makeover in the Chollas Creek Watershed					
Project serves a need of a DAC?:		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Funding Match Waiver request?:		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		
Category		(a) Requested Grant Amount	(b) Cost Share: Non-State Fund Source* (Funding Match)	(c) Cost Share: Other State Fund Sources*	(d) Total
(a)	Direct Project Administration	\$20,741	\$0	\$0	\$20,741
	Task 1: Project Management	\$12,352	\$0	\$0	\$12,352
	Task 2: Labor Compliance Program	\$0	\$0	\$0	\$0
	Task 3: Reporting	\$8,389	\$0	\$0	\$8,389
(b)	Land Purchase/ Easement	\$0	\$0	\$0	\$0
	Task 4: Land Purchase	\$0	\$0	\$0	\$0
(c)	Planning/ Design/ Environmental	\$3,136	\$0	\$0	\$3,136
	Task 5: Feasibility Studies	\$0	\$0	\$0	\$0
	Task 6: CEQA Documentation	\$0	\$0	\$0	\$0
	Task 7: Permitting	\$0	\$0	\$0	\$0
	Task 8: Design	\$0	\$0	\$0	\$0
	Task 9: Project Performance Monitoring Plan	\$3,136	\$0	\$0	\$3,136
(d)	Construction/ Implementation	\$518,123	\$0	\$0	\$518,123
	Task 10: Contract Services	\$0	\$0	\$0	\$0
	Task 11: Construction Administration	\$67,228	\$0	\$0	\$67,228
	Task 12: Construction/Implementation	\$450,895	\$0	\$0	\$450,895
	12.1: Agreement Negotiation	\$67,200	\$0	\$0	\$67,200
	12.2: Education	\$53,760	\$0	\$0	\$53,760
	12.3: Water Use Evaluations	\$3,750	\$0	\$0	\$3,750
	12.4: Monitoring and Verification	\$55,000	\$0	\$0	\$55,000
	12.5: Tracking and Mapping	\$27,125	\$0	\$0	\$27,125
	12.6: Landscape Earthwork Installation	\$120,560	\$0	\$0	\$120,560
	12.7: Rainbarrel Installation	\$43,750	\$0	\$0	\$43,750
	12.8: Greywater Installation	\$45,000	\$0	\$0	\$45,000
	12.9 Conservation Home Retrofit Devices	\$34,750	\$0	\$0	\$34,750
(e)	Grand Total	\$542,000	\$0	\$0	\$542,000

***List sources of funding:** This project is requesting a DAC waiver and all project costs will be borne by the grant.

Row (a) Direct Project Administration Costs

Task 1: Project Management

Costs include time for Groundwork staff to complete project management duties (including preparation of invoices and grant agreement materials). A Groundwork Project Manager will dedicate 255 hours at a rate of \$39.20/hour. Hourly rate was calculated based on salary plus benefits, and does not include overhead. This task also includes Groundwork staff time to execute MOAs with project partners, for a total of 60 hours at a rate of \$39.20/hour. Total cost for this task is \$12,352.

Task 2: Labor Compliance Program (LCP)

Not applicable.

Task 3: Reporting

Costs for reporting include time for Groundwork staff to complete grant reporting duties. A Groundwork Project Manager will dedicate 214 total hours to this task with a billing rate of \$39.20/hour, for a total of \$8,389.

Row (b) Land Purchase/ Easement

Task 4: Land Purchase

Not applicable.

Row (c) Planning/ Design/ Engineering/ Environmental Documentation

Task 5: Feasibility Studies

Not applicable.

Task 6: CEQA Documentation

Not applicable.

Task 7: Permitting

Not applicable.

Task 8: Design

Not applicable.

Task 9: Project Performance Monitoring Plan

Costs include a Groundwork Project Manager's time to develop a Project Performance Monitoring Plan compliant with DWR contract requirements. This effort will take 80 hours, at a rate of \$39.20/hour, for a total cost of \$3,136.

Row (d) Construction/Implementation

Task 10: Contract Services

Not applicable.

Task 11: Construction Administration

Costs include a Groundwork Project Manager's time to manage and oversee implementation activities conducted under Subtask 12.1 through 12.2. This effort is estimated as 1,715 hours at a rate of \$39.20/hour, for a total cost of \$67,228.

Task 12: Implementation

Implementation costs are a combination of Groundwork and project partner staff time, materials, and contracted labor. These costs are broken down by subtask in **Table 4-9**, and based on salary plus benefits and typical costs for standard materials. All effort and materials are based on implementation of the Conservation Home Makeover at 50 low-income residences.

Table 4-9: Task 12 Costs for Conservation Home Makeover in Chollas Creek

	Deliverables / Activity	Hourly Rate/Unit Cost	Number of Hours/Units	Total Cost
<i>Subtask 12.1 Agreement Negotiation</i>				<i>\$67,200</i>
	Community Organizer	\$22.40/hour	3,000 hours	\$67,200
<i>Subtask 12.2 Education</i>				<i>\$53,760</i>
	Educator	\$22.40/hour	2,400 hours	\$53,760
<i>Subtask 12.3 Water Use Evaluation</i>				<i>\$3,750</i>
	Water Use Evaluation	\$25/hour	150 hours (3 hrs each; 50 evaluations)	\$3,750
<i>Subtask 12.4 Monitoring and Verification</i>				<i>\$55,000</i>
	Maintenance	\$25/hour	600 hours	\$15,000
	Monitoring and Verification	\$25/hour	1,600 hours	\$40,000
<i>Subtask 12.5 Tracking and Mapping</i>				<i>\$27,125</i>
	Tracking/Mapping	\$25/hour	650 hours	\$16,250
	Analysis	\$25/hour	435 hours	\$10,875
<i>Subtask 12.6 Landscape Earthwork Installation</i>				<i>\$120,560</i>
	Trees	\$100/tree	200 trees	\$20,000
	Native Landscaping	\$3/plant	9,520 plants	\$28,560
	Design	\$20/hour	1,200 hours (24 hrs/site; 50 sites)	\$24,000
	Installation	\$20/hour	2,400 hours (48 hrs/site; 50 sites)	\$48,000
<i>Subtask 12.7 Rainbarrel Installation</i>				<i>\$43,750</i>
	Rainbarrels	\$800/rainbarrel	50 rainbarrels	\$40,000
	Rainbarrel installation	\$25/hour	150 hours	\$3,750
<i>Subtask 12.8 Greywater Installation</i>				<i>\$45,000</i>
	Greywater Systems	\$800/system	50 systems	\$40,000
	Greywater System Installation	\$25/hour	200 hours	\$5,000
<i>Subtask 12.9 Conservation Home Retrofit Devices</i>				<i>\$34,750</i>
	Water Efficient Toilets	\$200/toilet	100 toilets	\$20,000
	Water Efficient Faucets	\$50/faucet	150 faucets	\$7,500
	Water Efficient Showerheads	\$35/showerhead	100 showerheads	\$3,500
	Water Efficient Device Installation	\$25/hour	150 hours	\$3,750
Task 12 Total				\$450,895

Project 3: San Diego Water Conservation Program

Local Project Sponsor: City of San Diego

Partners: Water Conservation Garden (The Garden) and San Diego Sustainable Living Institute (SDSLI)

A project summary budget table consistent with Table 8 in the 2015 PSP is provided below as **Table 4-10** for the *San Diego Water Conservation Program* project. This project has a 34% funding match.

Table 4-10: Total Project Budget for San Diego Water Conservation Program

Proposal Title: San Diego 2015 IRWM Implementation Grant Proposal					
Project Title: San Diego Water Conservation Program					
Project serves a need of a DAC?:		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Funding Match Waiver request?:		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		
		(a)	(b)	(c)	(d)
Category		Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Sources*	Total
(a)	Direct Project Administration	\$40,000	\$0	\$0	\$40,000
	Task 1: Project Management	\$15,000	\$0	\$0	\$15,000
	Task 2: Labor Compliance Program	\$0	\$0	\$0	\$0
	Task 3: Reporting	\$25,000	\$0	\$0	\$25,000
(b)	Land Purchase/ Easement	\$0	\$0	\$0	\$0
	Task 4: Land Purchase	\$0	\$0	\$0	\$0
(c)	Planning/ Design/ Environmental	\$8,515	\$20,000	\$0	\$28,515
	Task 5: Feasibility Studies	\$0	\$0	\$0	\$0
	Task 6: CEQA Documentation	\$0	\$0	\$0	\$0
	Task 7: Permitting	\$0	\$0	\$0	\$0
	Task 8: Design	\$3,515	\$20,000	\$0	\$23,515
	Task 9: Project Performance Monitoring Plan	\$5,000	\$0	\$0	\$5,000
(d)	Construction/ Implementation	\$817,485	\$417,344	\$0	\$1,234,829
	Task 10: Contract Services	\$0	\$0	\$0	\$0
	Task 11: Construction Administration	\$0	\$0	\$0	\$0
	Task 12: Construction/Implementation	\$817,485	\$413,830	\$0	\$1,234,829
	12.1: Greywater Rebate Program	\$150,000	\$70,000	\$0	\$220,000
	12.2: Turf Replacement Rebate Program	\$324,656	\$347,344	\$0	\$672,000
	12.3: The Garden's Outreach/Workshops/ Training	\$251,909	\$0	\$0	\$251,909
	12.4: SDSLIs Outreach/Workshops/Training	\$90,920	\$0	\$0	\$90,920
(e)	Grand Total	\$866,000	\$437,344	\$0	\$1,303,344
*List sources of funding: All \$433,830 in cost share will be funded by the City of San Diego's Public Utilities Department operating funds and is in-kind staff labor and direct rebate costs.					

Row (a) Direct Project Administration Costs

Task 1: Project Management

Costs for project management include time to complete administrative duties. City staff will dedicate 250 hours to this task at an average hourly rate of \$59.90. Total cost for this task is \$15,000. Hourly rates were calculated based on salary plus benefits, and do not include overhead.

Task 2: Labor Compliance Program (LCP)

Not applicable – not a public works project requiring a LCP.

Task 3: Reporting

Cost for reporting will include time to complete reporting duties. City staff will dedicate 417 hours to this task at an average hourly rate of \$59.90 (salary plus benefits). Total cost for this task is \$25,000.

Row (b) Land Purchase/ Easement

Task 4: Land Purchase

Not applicable – no land purchases will be required to implement this project.

Row (c) Planning/ Design/ Engineering/ Environmental Documentation

Task 5: Feasibility Studies

Not applicable – this project expands an existing rebate, and no feasibility studies are required for this or other components.

Task 6: CEQA Documentation

Not applicable - no CEQA or other environmental documentation is required for this project.

Task 7: Permitting

Not applicable – none of the project activities require permits.

Task 8: Design

This task involves development of the greywater rebate guidelines. Based on the City's experience, this will require 334 hours of staff time, at an average rate of \$59.90/hour. Costs also include landscape architectural drawings for the irrigation exhibit at The Garden, costing \$3,515 for a contractor. The total cost for this task is \$23,515.

Task 9: Project Performance Monitoring Plan

Work includes City staff time to develop a Project Performance Monitoring Plan. This effort is estimated to take 83 hours, at an average hourly rate of \$59.90 (salary plus benefits), for a total cost of \$5,000.

Row (d) Construction/Implementation

Task 10: Contract Services

Not applicable – no contracting is required for this project.

Task 11: Construction Administration

Not applicable – no construction is included in this project, and no construction administration is required.

Task 12: Construction/Implementation Activities

Costs for implementation include City staff time to implement the greywater and turf rebate programs, as well as staff time for The Garden and SDSLI to implement their outreach programs. **Table 4-11** provides a summary of the costs associated with implementation of each of the subtasks for implementation of this project.

Table 4-11: Task 12 Implementation Costs for San Diego Water Conservation Program

	Deliverables/Activity	Hourly Rate/Unit Cost	Number of Hours/Units	Total Cost
<i>Subtask 12.1 Greywater Rebate Program</i>				\$220,000
	Greywater Rebates	\$200/system	1,000 systems	\$200,000
	City Staff to manage rebates	\$59.90/hour	334 hours	\$20,000
<i>Subtask 12.2 Turf Replacement Rebate Program</i>				\$672,000
	Turf Rebates	\$1.50 - \$2.00/sq ft	440,000 sq ft	\$660,000
	City Staff to Manage Rebates	\$59.90/hour	200 hours	\$12,000
<i>Subtask 12.3 The Garden's Outreach/Workshops/Training</i>				\$251,909
<i>Irrigation Exhibit</i>				
	Content Development	Labels, images, video production and support literature (staff and contractor)		\$7,000
	Exhibit Installation	Contractor fee to install exhibit and staff/contractor time to prepare site		\$40,000
	Interpretive Components	Contractor fee for acquisition and production of items for the exhibit (products, printing labels, audio/visual materials, etc.)		\$24,494
<i>Education/Outreach</i>				
	Staff and Educator labor	\$8/hour - \$28/hour	6,800 hours	\$141,396
	Presentations	\$1,750-\$875/presentation	10-20 presentations	\$17,500
	Equipment, Supplies, and Literature Development	Non-labor expenses based on previous experience, plus overhead and contingency		\$18,014
<i>Subtask 12.4 SDSLI's Outreach/Workshops/Training</i>				\$90,920
<i>Laundry to Landscape</i>				
	Materials – demonstration items and mulch	\$405/workshop	24 workshops	\$9,720
	Workshop prep, delivery and follow up	\$50/hour; 24 hours/workshop	24 workshops	\$28,800
<i>Rainwater Harvesting</i>				
	Materials – barrel, pipe, fittings	\$400/workshop	10 workshops	\$4,000
	Workshop prep, delivery and follow up	\$50/hour; 24 hours/workshop	10 workshops	\$12,000
<i>Water Conservation for the Landowner</i>				
	Materials – handouts	\$50/workshop	11 workshops	\$550
	Workshop prep, delivery and follow-up	\$50/hour; 15 hours/workshop	11 workshops	\$8,250
<i>Water Harvesting Neighborhood Tours</i>				
	Materials – handouts	\$100/tour	6 tours	\$600
	Tour prep, tour costs (staff, speaker fee, bus rental) and follow-up	\$50/hour; \$1,000/bus; 70 hrs and 1 bus/tour	6 tours	\$27,000
Task 12 Total				\$1,234,829

Project 4: Ms. Smarty-Plants Grows Water-Wise Schools

Local Project Sponsor: The Water Conservation Garden (The Garden)

Partners: Otay Water District, Helix Water District, and K-12 Schools within La Mesa-Spring Valley and Lemon Grove School Districts

A project summary budget table consistent with Table 8 in the 2015 PSP is provided below as **Table 4-12** for the Ms. Smarty-Plants Grows Water-Wise Schools project. This project has a 19% funding match.

Table 4-12: Total Project Budget for Ms. Smarty-Plants Grows Water-Wise Schools

Proposal Title: San Diego 2015 IRWM Implementation Grant Proposal					
Project Title: Ms. Smarty-Plants Grows Water-Wise Schools					
Project serves a need of a DAC?:		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Funding Match Waiver request?:		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		
Category		(a) Requested Grant Amount	(b) Cost Share: Non-State Fund Source* (Funding Match)	(c) Cost Share: Other State Fund Sources*	(d) Total
(a)	Direct Project Administration	\$22,000	\$44,000	\$0	\$66,000
	Task 1: Project Management	\$0	\$22,000	\$0	\$22,000
	Task 2: Labor Compliance Program	\$22,000	\$0	\$0	\$22,000
	Task 3: Reporting	\$0	\$22,000	\$0	\$22,000
(b)	Land Purchase/ Easement	\$0	\$0	\$0	\$0
	Task 4: Land Purchase	\$0	\$0	\$0	\$0
(c)	Planning/ Design/ Environmental	\$22,413	\$58,443	\$0	\$80,846
	Task 5: Feasibility Studies	\$0	\$35,788	\$0	\$35,788
	Task 6: CEQA Documentation	\$0	\$0	\$0	\$0
	Task 7: Permitting	\$20,000	\$0	\$0	\$20,000
	Task 8: Design	\$0	\$22,578	\$0	\$22,578
	Task 9: Project Performance Monitoring Plan	\$2,413	\$77	\$0	\$2,490
(d)	Construction/ Implementation	\$607,587	\$55,307	\$0	\$662,894
	Task 10: Contract Services	\$18,000	\$0	\$0	\$18,000
	Task 11: Construction Administration	\$22,242	\$0	\$0	\$22,242
	Task 12: Construction/Implementation	\$567,345	\$55,307	\$0	\$622,652
	12.1: Education and Outreach	\$247,725	\$18,000	\$0	\$265,725
	12.2: School Landscape Transitions	\$185,970	\$12,000	\$0	\$197,970
	12.3: Classroom Expansion	\$133,650	\$25,307	\$0	\$158,957
(e)	Grand Total	\$652,000	\$157,750	\$0	\$809,750
<p>*List sources of funding: Matching funds are provided through a number of local and private grants, local water districts, and The Garden's budget. The Garden's funds are raised through earned income, general contributions, and reserves. Funding for the architectural drawings (Task 8) was provided as in-kind labor from Bennett and Associates. Sources of local grants include Rice Family Foundation, Heller Foundation, San Diego Women's Foundation, Wells Fargo Foundation, SDG&E, Sempra Energy, Cal American Water, and Sprites, while local water agencies include City of San Diego, Sweetwater Authority, Helix Water District, Otay Water District, and SDCWA.</p>					

Row (a) Direct Project Administration Costs

Task 1: Project Management

Costs for project management include The Garden's staff time to manage grant contracting and administrative duties. These costs also include oversight of the Project Coordinator, Educator, and Landscape Designer. The Garden's staff will dedicate 714 hours to this task with a range of hourly rates from \$26-36/hour. Total cost for this task is \$22,000. Hourly rates were calculated based on salary and benefits, plus 5% overhead.

Task 2: Labor Compliance Program (LCP)

The Garden will contract with Golden State to develop and implement an LCP for the classroom expansion component. Based on experiences of similar projects, this cost is estimated at approximately 10% of the construction costs or \$22,000.

Task 3: Reporting

Costs for reporting will include time to complete quarterly progress reports and final project report. The Garden's staff will dedicate 714 hours to this task with a range of hourly rates from \$26-36/hour (salary and benefits, plus 5% overhead), for a total cost of \$22,000.

Row (b) Land Purchase/ Easement

Task 4: Land Purchase

Not applicable – The Garden has a long-term lease with Cuyamaca College and the classroom will be built onsite.

Row (c) Planning/ Design/ Engineering/ Environmental Documentation

Task 5: Feasibility Studies

Costs associated with this task include costs to complete *The Water Conservation Garden Master Plan*. Costs are based on completed work and total \$35,778.

Task 6: CEQA Documentation

All CEQA requirements for this project were met through Cuyamaca College's 2013 *Facilities Master Plan EIR*. Because this EIR includes a number of non-project-related activities, costs incurred by Cuyamaca College to develop the 2013 EIR are not included in this project budget.

Task 7: Permitting

Work in this task involves obtaining structural, mechanical, electrical, plumbing, fire suppression, and solar panel permits for construction of the classroom expansion. These permits will be obtained by the Contractor in coordination with The Garden. Total costs are anticipated to be \$20,000 for this effort.

Task 8: Design

Work in this task includes engineering and architectural design for the classroom expansion. These services are provided as in-kind labor from Bennett and Associates, who have provided a quote of \$22,578 for these costs.

Task 9: Project Performance Monitoring Plan

The Garden will dedicate a total of 80 staff hours to develop a Project Performance Monitoring Plan at a range of hourly rates from \$26-36/hour, for a total cost of \$2,490 for this task.

Row (d) Construction/Implementation

Task 10: Contract Services

Costs for contract services include The Garden's staff time to secure a project architect for the classroom expansion, and put out a bid for a contractor. The Garden anticipates dedicating 500 hours to this task, at an hourly rate of \$36/hour, for a total of \$18,000.

Task 11: Construction Administration

Costs for this task are based on an estimate from Wheelihan Construction for construction management, supervision, and reporting. These efforts are estimated to cost \$22,242.

Task 12: Construction/Implementation

Costs for construction and implementation include a combination of staff time for The Garden, construction contractor time, and materials. These costs are based on salaries for The Garden staff, contractor estimates, and The Garden's past experience with producing and implementing the Ms. Smarty-Plants program. A break-down of implementation and construction costs by component are presented in **Table 4-13**.

Table 4-13: Task 12 Implementation Costs for *Ms. Smart-Plants Grows Water-Wise Schools*

	Deliverables/Activity	Hourly Rate/Unit Cost	Number of Hours/Units	Total Cost
Subtask 12.1 Education and Outreach				\$265,725
	Director of Education	\$36/hour	600 hours	\$21,600
	Program Coordinator	\$26.25/hour	4,500 hours	\$118,125
	Educator	\$14.70/hour	6,000 hours	\$88,200
	Bookkeeper	\$8/hour	600 hours	\$4,800
	Marketing Materials	Brochures, flyers, Ms. Smarty-Plants materials		\$15,000
	Website Development and Update	Development and update fees		\$6,000
	Social Media and Advertising	Social Media updates and advertising fees		\$6,500
	Office supplies and equipment	Computer use and supplies for Ms. Smarty-Plants program		\$5,500
Subtask 12.2 School Landscape Transitions				\$197,970
	Director of Education	\$36/hour	600 hours	\$21,600
	Program Coordinator	\$26.25/hour	1,500 hours	\$37,375
	Landscape Designer	\$30/hour	1,500 hours	\$45,000
	Bookkeeper	\$8/hour	600 hours	\$4,800
	Incentives	\$5,333/school	15 schools	\$79,995
	Gardening tools	Spades, gloves, and clippers		\$7,200
Subtask 12.3 Classroom Expansion				\$158,957
	Site Set-Up	Contractor estimate		\$4,900
	Demolition	Contractor estimate		\$3,200
	Concrete	Contractor estimate		\$5,300
	Metals	Contractor estimate		\$33,000
	Carpentry	Contractor estimate		\$19,000
	Insulation/Sealing	Contractor estimate		\$5,700
	Doors and Windows	Contractor estimate		\$46,000
	Finishes	Contractor estimate		\$19,900
	Awning	Contractor estimate		\$450
	Mechanical	Contractor estimate		\$4,200
	Electrical	Contractor estimate		\$7,200
	Site Clean-Up	Contractor estimate		\$1,200
	Contingency	5% of Contractor Costs, including Construction Administration		\$8,907
	Task 12 Total			

Rural Water Infrastructure Program

Project 5: Rural Disadvantaged Community Partnership Project - Phase III

Local Project Sponsor: Rural Community Assistance Corporation (RCAC)

Partners: Alter Terra, Indian Health Services (IHS), Bureau of Indian Affairs (BIA), San Diego County Water Authority (SDCWA), City of San Diego (City), and State Water Resources Control Board (SWRCB)

A project summary budget table consistent with Table 8 in the 2015 PSP is provided below as **Table 4-14** for the *Rural Disadvantaged Community Partnership Project - Phase III* project. This project has a 40% funding match.

Table 4-14: Total Project Budget for Rural Disadvantaged Community Partnership Project - Phase III

Proposal Title: San Diego 2015 IRWM Implementation Grant Proposal					
Project Title: Rural Disadvantaged Community Partnership Project - Phase III					
Project serves a need of a DAC?:		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Funding Match Waiver request?:		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		
		(a)	(b)	(c)	(d)
Category		Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Sources*	Total
(a)	Direct Project Administration	\$97,950	\$0	\$0	\$97,950
	Task 1: Project Management	\$49,950	\$0	\$0	\$49,950
	Task 2: Labor Compliance Program	\$14,100	\$0	\$0	\$14,100
	Task 3: Reporting	\$33,900	\$0	\$0	\$33,900
(b)	Land Purchase/ Easement	\$0	\$0	\$0	\$0
	Task 4: Land Purchase	\$0	\$0	\$0	\$0
(c)	Planning/ Design/ Environmental	\$942,600	\$133,600	\$0	\$1,076,200
	Task 5: Feasibility Studies	\$0	\$0	\$0	\$0
	Task 6: CEQA Documentation	\$161,820	\$13,700	\$0	\$175,520
	Task 7: Permitting	\$129,630	\$0	\$0	\$129,630
	Task 8: Design	\$600,300	\$119,900	\$0	\$720,200
	Task 9: Project Performance Monitoring Plan	\$50,850	\$0	\$50,850	\$50,850
(d)	Construction/ Implementation	\$1,959,450	\$1,893,750	\$0	\$3,853,200
	Task 10: Contract Services	\$246,000	\$0	\$0	\$246,000
	Task 11: Construction Administration	\$222,900	\$0	\$0	\$222,900
	Task 12: Construction/Implementation	\$1,490,550	\$1,893,750	\$0	\$3,384,300
	12.1: Pauma Reservation Water System	\$67,200	\$220,300	\$0	\$287,500
	12.2: Campo Reservation South System	\$65,600	\$219,800	\$0	\$285,400
	12.3: San Pasqual Tribe Reclaimed Water Expansion	\$328,000	\$0	\$0	\$328,000
	12.4: San Pasqual Tribe Water Meters	\$204,900	\$100,000	\$0	\$304,900
	12.5: La Jolla Tribe Water Tank	\$355,000	\$0	\$0	\$355,000
	12.6: Quiet Oaks Mobile Home Park Nitrate Treatment	\$60,850	\$353,650	\$0	\$414,500
	12.7: Willowside Terrace Water System Connection	\$6,000	\$1,000,000	\$0	\$1,006,000
	12.8: Richardson Beardsley Park Treatment	\$83,500	\$0	\$0	\$83,500
	12.9: Smuggler's Gulch Floating Trash Booms	\$184,500	\$0	\$0	\$184,500
	12.10: Tijuana River-San Diego Connector Restoration Project	\$135,000	\$0	\$0	\$135,000
(e)	Grand Total	\$3,000,000	\$2,027,350	\$0	\$5,027,350
*List sources of funding: Category C funding match includes: \$107,300 from IHS for NEPA/CEQA and design (projects 1 and 2); \$20,000 from BIA for design (project 3). Category D funding match includes: \$1,000,000 from SWRCB SRF (project 7); \$100,000 from EPA (project 3); \$440,100 from IHA (projects 1 and 2).					

Row (a) Direct Project Administration Costs

Task 1: Project Management

Costs include time to complete administrative duties. RCAC and Alter Terra staff will dedicate 585 hours with staff rates at \$75 and \$120 per hour, depending on discipline. Total costs for Task 1 are \$49,950.

Task 2: Labor Compliance Program (LCP)

Costs for labor compliance include time for RCAC and Alter Terra to work with local DACs to ensure labor compliance, which is anticipated to require 188 hours at a staff rate of \$75 per hour. Total costs are \$14,100.

Task 3: Reporting

Costs for reporting include 404 hours of RCAC and Alter Terra staff time to complete quarterly and final project reports at staff rates ranging between \$120 and \$75 per hour, depending on discipline. Total costs are \$33,900.

Row (b) Land Purchase/ Easement

Task 4: Land Purchase: Not applicable.

Row (c) Planning/ Design/ Engineering/ Environmental Documentation

Task 5: Feasibility Studies: Not applicable.

Task 6: CEQA Documentation

CEQA and NEPA concurrence is required for all components at various levels. Details about each component are provided in **Table 4-15**. Note that hourly rates for RCAC staff range from \$75 to \$120 as described above.

Task 7: Permitting

Permitting is required for several components at various levels. Note that hourly rates for RCAC staff range from \$75 to \$120 as described above. Details about each component in **Table 4-15**.

Task 8: Design

Final design is required for all components at various levels. Note that hourly rates for RCAC staff range from \$75 to \$120 as described above. Details about each component in **Table 4-15**.

Table 4-15: Tasks 6-8 Costs for Rural Disadvantaged Community Partnership Project - Phase III

#	Task 6: CEQA	Task 7: Permitting	Task 8: Design
1	100 hours = \$8,400	Not applicable	RCAC staff at 350 hours and IHS Engineer at 333 hours (\$150/hr) = \$79,800
2	100 hours = \$8,400	Not applicable	RCAC staff at 214 hours and IHS Engineer at 333 hours (\$150/hr) = \$68,250
3	Not applicable	Not applicable	RCAC staff at 162 hours and a Tribe Engineer at 200 hours (\$100/hr) = \$33,500
4	Not applicable	Not applicable	RCAC staff at 120 hours = \$9,900
5	490 hours = \$40,800	Not applicable	RCAC staff at 130 hours and a Tribe Engineer at 400 hours (\$75/hr) = \$45,600
6	100 hours = \$8,400	38 hours = \$3,210	RCAC staff at 380 hours = \$32,100
7	280 hours = \$24,600	38 hours = \$3,210	RCAC staff at 445 hours and Contractor at 2,500 hours (150/hr) = \$412,650
8	56 hours = \$4,920	38 hours = \$3,210	RCAC staff at 100 hours = \$8,400
9	\$40,000 from Consulting firm	\$60,000 from Consulting firm	Alter Terra staff with a billing rate of \$75 will complete design in 200 hours = \$15,000
10	\$40,000 from Consulting firm	\$60,000 from Consulting firm	Alter Terra staff with a billing rate of \$75 will complete design in 200 hours = \$15,000
Total	\$175,520	\$129,630	\$720,200

Task 9: Project Performance Monitoring Plan

A Project Performance Monitoring Plan will be developed by RCAC (65 hours per Component 1-8, total 455 hours) and Alter Terra (total 160 hours) at rates consistent with those for Task 1. Total is \$50,850.

Row (d) Construction/Implementation

Task 10: Contract Services

Costs for contract services will incorporate RCAC staff, including Project Manager at \$120/hr (80 hours per project, total 800 hours) and RCAC support staff at \$75/hr (200 hours per project, total 2,000 hours). Total is \$246,000.

Task 11: Construction Administration

Construction administration activities will be completed by RCAC and Alter Terra. RCAC Project Manager (\$120/hr) will allocate 20 hours and RCAC support staff (\$75/hr) will allocate 60 hours for Components 1, 2, 3, 4, 5, 6, and 8. RCAC Project Manager will allocate 80 hours and RCAC support staff will allocate 200 hours for Component 7. Alter Terra will dedicate 1,000 hours of staff time for Components 9 and 10 (2,000 hours total) at a billing rate of \$75/hr.

Task 12: Construction/Implementation

Costs associated with Task 12 are provided in **Table 4-16**. Costs are based on preliminary cost estimates, estimates from vendors and contractors, and RCAC's experience working with local DACs.

Table 4-16: Task 12 Costs for Rural Disadvantaged Community Partnership Project - Phase III

	Deliverables/Activity	Hourly Rate/Unit Cost	Number of Hours/Units	Total Cost
<i>Subtask 12.1 Pauma Reservation Water System</i>				\$287,500
	Water storage tank, foundation, water meter connection	\$173,000/unit	1 unit	\$173,000
	Tank demolition, piping, gate valves	\$10,900/unit	5 units	\$54,500
	Construction labor	\$200/hour	300 hours	\$60,000
<i>Subtask 12.2 Campo Reservation South System</i>				\$285,400
	Well drilling, well casing, screen, grouting, filter	\$100/unit	675 units	\$67,500
	Well development, water main, fencing, piping, etc.	\$272/unit	580 units	\$157,900
	Pumphouse power, disinfection, close-out	\$100/unit	600 units	\$60,000
<i>Subtask 12.3 San Pasqual Tribe Reclaimed Water Expansion</i>				\$328,000
	Piping and appurtenances	\$200/unit	1,400 units	\$280,000
	Piping installation and project close-out	\$200/hour	240 hours	\$48,000
<i>Subtask 12.4 San Pasqual Tribe Water Meters</i>				\$304,900
	Meters, Miscellaneous parts	\$645/unit	245 meters	\$157,900
	Installation	\$100/hour	1,470 hours	\$147,000
<i>Subtask 12.5 La Jolla Tribe Water Tank</i>				\$355,000
	80,000 gallon steel water tank, distribution service lines	\$500/unit	550 units	\$275,000
	Installation and project close-out	\$100/hour	800 hours	\$80,000
<i>Subtask 12.6 Quiet Oaks Mobile Home Park Nitrate Treatment</i>				\$414,500
	RO Components (capacity of 25,000 gpd)	\$175,500	1 unit	\$175,500
	Misc Controls, Piping, Installation	\$100/unit	2,390 unit	\$239,000
<i>Subtask 12.7 Willowside Terrace Water System Connection</i>				\$1,006,000
	6,900 LF 8-inch water main, valves, and appurtenances	\$500/unit	1000 units	\$500,000
	Installation and project close-out	\$200/hour	2,530 hours	\$506,000
<i>Subtask 12.8 Richardson Beardsley Park Treatment</i>				\$83,500
	Iron/manganese treatment system	\$59,500/unit	1 units	\$59,500
	Installation and project close-out	\$100/hour	240 hours	\$24,000
<i>Subtask 12.9 Smuggler's gulch Floating Trash Booms</i>				\$184,500
	Manufacture and install trash booms	\$45,000/unit	3 units	\$135,000
	Trash removal (3 years)	\$75/hour	660 hours	\$49,500
<i>Subtask 12.10 Tijuana River-San Diego Connector Restoration Project</i>				\$135,000
	Bioswales, pervious pavers, native plants	\$500/unit	171 units	\$85,500
	Trash removal, planting vegetation	\$75/hour	660 hours	\$49,500
Task 12 Total				\$3,384,300

Water Reuse Program

Project 6: Integrated Water Resource Solutions for the Carlsbad Watershed

Local Project Sponsor: San Elijo Joint Powers Authority (San Elijo JPA)

Partners: City of Encinitas, City of Solana Beach, San Dieguito Water District (SDWD), Santa Fe Irrigation District (SFID), Olivenhain Municipal Water District (OMWD), and San Elijo Lagoon Conservancy

A project summary budget table consistent with Table 8 in the PSP is provided below as **Table 4-17** for the *Integrated Water Resource Solutions for Carlsbad Watershed*. This project has a 78% funding match.

Table 4-17: Total Project Budget for *Integrated Water Resource Solutions for the Carlsbad Watershed*

Proposal Title: San Diego 2015 IRWM Implementation Grant Proposal					
Project Title: Integrated Water Resource Solutions for the Carlsbad Watershed					
Project serves a need of a DAC?:		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Funding Match Waiver request?:		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		
Category		(a) Requested Grant Amount	(b) Cost Share: Non-State Fund Source* (Funding Match)	(c) Cost Share: Other State Fund Sources*	(d) Total
(a)	Direct Project Administration	\$50,000	\$75,000	\$0	\$125,000
	Task 1: Project Management	\$25,000	\$27,500	\$0	\$52,500
	Task 2: Labor Compliance Program	\$0	\$30,000	\$0	\$30,000
	Task 3: Reporting	\$25,000	\$17,500	\$0	\$42,500
(b)	Land Purchase/ Easement	\$0	\$10,000	\$0	\$10,000
	Task 4: Land Purchase	\$0	\$10,000	\$0	\$10,000
(c)	Planning/ Design/ Engineering/ Environmental	\$236,898	\$1,452,433	\$0	\$1,689,331
	Task 5: Feasibility Studies	\$0	\$0	\$0	\$0
	Task 6: CEQA Documentation	\$18,750	\$153,783	\$0	\$172,533
	Task 7: Permitting	\$29,775	\$38,775	\$0	\$68,550
	Task 8: Design	\$183,373	\$1,259,875	\$0	\$1,443,248
	Task 9: Project Performance Monitoring Plan	\$5,000	\$0	\$0	\$5,000
(d)	Construction/ Implementation	\$2,213,102	\$7,564,889	\$0	\$9,777,991
	Task 10: Contract Services	\$0	\$9,600	\$0	\$9,600
	Task 11: Construction Administration	\$44,807	\$646,618	\$0	\$691,425
	Task 12: Construction/Implementation	\$2,168,295	\$6,908,671	\$0	\$9,076,966
	12.1: Highway 101 Streetscape	\$0	\$5,097,596	\$0	\$5,097,596
	12.2: Highway 101 Greenstreet Retrofit	\$148,070	\$0	\$0	\$148,070
	12.3: Manchester Avenue Recycled Water Pipeline	\$450,225	\$750,075	\$0	\$1,200,300
	12.4: Via De La Valle/Highway 101 Recycled Water Pipeline	\$600,000	\$636,000	\$0	\$1,236,000
	12.5: Encinitas Ranch/ Requeza St Recycled Water Pipelines	\$600,000	\$425,000	\$0	\$1,025,000
	12.6: San Elijo WRF LID Project	\$295,000	\$0	\$0	\$295,000
	12.7: SELC Water Quality/Quantity Monitoring	\$35,000	\$0	\$0	\$35,000
	12.8: SELC Community Outreach	\$40,000	\$0	\$0	\$40,000
(e)	Grand Total	\$2,500,000	\$9,102,322	\$0	\$11,602,322
<p>*List sources of funding: Funding match for Tasks 1, 2, 3, 9, and Component 6 will be provided by SEJPA CIP Fund. Funding match for Component 5 will be provided by private financing from the Encinitas Ranch HOA. Funding match for Components 1 and 2 will be provided by the City of Encinitas CIP Fund. Funding match for Component 3 will be provided by the OMWD CIP Fund. Funding match for Component 4 will be provided by the City of Solana Beach CIP Fund.</p>					

Row (a) Direct Project Administration Costs

Task 1: Project Management

Costs for project administration include time for a consultant to complete administrative duties. The proposed task budget of \$52,500 is based on 420 total hours of a Principal Engineer at billing rate of \$125/hr.

Task 2: Labor Compliance Program (LCP)

Costs associated with this task include time required by a consultant to prepare annual compliance reports and manage a LCP for a proposed budget of \$30,000.

Task 3: Reporting

Costs for this task include time for a consultant to prepare the reporting needs. The proposed task budget of \$42,500 is based on 340 total hours of a Principal Engineer at billing rate of \$125/hr.

Row (b) Land Purchase/ Easement

Task 4: Land Purchase

Costs include staff time and fees for preparing and filing easements with the Encinitas Ranch Golf Course and the City of Encinitas for a packaged pump station and construction of a recycled water pipeline within an existing recreational trail. Task budget of \$10,000 is based on historic efforts.

Row (c) Planning/ Design/ Engineering/ Environmental Documentation

Task 5: Feasibility Studies

Not applicable – no feasibility studies will be prepared for the proposed project.

Task 6: CEQA Documentation

Cost of this task is broken into subtasks following the six project components, as shown in the table below. Total task cost of \$172,533 is based on consultant proposals, filing fees, and historical costs for similar work.

Task 7: Permitting

Under this task, all relevant permits will be acquired for five components of the project, as shown in **Table 4-18**. Total task cost of \$68,550 is based on District/City staff time to prepare permits, based on historical efforts.

Task 8: Design

Cost of this task is broken into subtasks following the six project components, as shown in **Table 4-18**. Total task cost of \$1,443,248 is based on consultant proposals and historical costs for similar work.

Table 4-18: Task 6, 7, and 8 Costs for Integrated Water Resource Solutions for the Carlsbad Watershed

Activity or Deliverable	Task 6: CEQA	Task 7: Permitting	Task 8: Design
Component 1 Highway 101 Streetscape	\$117,433	\$11,500	\$874,125
Component 2 Highway 101 Greenstreet Retrofit	\$50	\$2,350	\$37,123
Component 3 Manchester Avenue Recycled Water Pipeline	\$25,000	\$39,700	\$135,000
Component 4 Via De La Valle/Highway 101 Recycled Water Pipeline	\$15,000	\$5,000	\$152,000
Component 5 Encinitas Ranch/ Requeza St Recycled Water Pipelines	\$15,000	\$10,000	\$200,000
Component 6 San Elijo WRF LID Project	\$50	\$0	\$45,000
Totals	\$172,533	\$68,550	\$1,443,248

Task 9: Project Performance Monitoring Plan

Costs for this task include time for a consultant to complete the PPMP. The proposed task budget of \$5,000 is based on 40 total hours of a Principal Engineer at billing rate of \$125/hr.

Row (d) Construction/Implementation

Task 10: Contract Services

Breakdown for the total task cost of \$9,600 is provided in **Table 4-19**. Presented costs are planning level estimates based on historical efforts to prepare bid documents and notice of award documents.

Task 11: Construction Administration

Breakdown for the total task cost of \$691,425 is provided in **Table 4-19**. Presented costs are planning level estimates based on historical efforts to manage contractor submittals review and answer requests for information.

Table 4-19: Task 10 and 11 Costs for Integrated Water Resource Solutions for the Carlsbad Watershed

Activity or Deliverable	Task 10: Contract Services	Task 11: Const. Admin.
Component 1 Highway 101 Streetscape	\$900	\$222,618
Component 2 Highway 101 Greenstreet Retrofit	\$900	\$14,807
Component 3 Manchester Avenue Recycled Water Pipeline	\$1,000	\$140,000
Component 4 Via De La Valle/Highway 101 Recycled Water Pipeline	\$900	\$144,000
Component 5 Encinitas Ranch/ Requeza St Recycled Water Pipelines	\$900	\$140,000
Component 6 San Elijo WRF LID Project	\$5,000	\$30,000
Totals	\$9,600	\$691,425

Task 12: Construction/Implementation

Breakdown for the total task cost of \$9,076,966. Task 12.1 is based on 30% design drawings and engineering cost estimate. Tasks 12.2-12.6 are planning level engineering cost estimates based on the quantity takeoffs described in the Work Plan. Tasks 12.7-12.8 are planning level estimates based on historical efforts to conduct the specified water quality monitoring and community outreach efforts in the Work Plan.

Table 4-20: Task 12 Costs for Integrated Water Resource Solutions for the Carlsbad Watershed

	Deliverables/Activity	Hourly Rate/Unit Cost	Number of Hours/Units	Total Cost
Subtask 12.1: Highway 101 Streetscape				\$5,097,596
	Demolition, Earthwork, Storm Drain	Import/export fill, 3,533 LF 12" storm drain, manholes, dry utilities		\$4,230,596
	Recycled Water System for Irrigation	Irrigation piping and controls, backflow		\$867,000
Subtask 12.2: Highway 101 Greenstreet Retrofit				
	Permeable Paving and Bioretention Basin	5,600 sq ft pavers, cut/fill, plantings		\$148,070
Subtask 12.3: Manchester Avenue Recycled Water Pipeline				
	Manchester Avenue pipeline	6 customers; 11 AFY	5280 LF	\$1,200,300
Subtask 12.4: Via De La Valle/Highway 101 Recycled Water Pipeline				
	Via De La Valle pipeline	13 customers; 38 AFY	6240 LF	\$1,236,000
Subtask 12.5: Encinitas Ranch/ Requeza St Recycled Water Pipeline				
	Encinitas Ranch/Requeza St pipelines	12 customers; 54 AFY	7250 LF	\$1,025,000
Subtask 12.6: San Elijo WRF LID Project				
	Treatment Control BMPs	Variable	2 BMPs	\$295,000
Subtask 12.7: SELC Water Quality/Quantity Monitoring				
	Water Quality/Quantity Monitoring	Monitoring equipment and labor		\$35,000
Subtask 12.8: SELC Community Outreach				
	Community Outreach	Fieldtrips and watershed education		\$40,000
Task 12 Total				\$9,076,966

Project 7: UCSD Water Conservation and Watershed Protection

Local Project Sponsor: University of California, San Diego (UCSD)

Partners: San Diego Coastkeeper, WildCoast, and Urban Corps of San Diego

A project summary budget table consistent with Table 8 in the PSP is provided below as **Table 4-21** for the *UCSD Water Conservation and Watershed Protection* project. This project has a 55% funding match.

Table 4-21: Total Project Budget for UCSD Water Conservation and Watershed Protection

Proposal Title: San Diego 2015 IRWM Implementation Grant Proposal					
Project Title: UCSD Water Conservation and Watershed Protection					
Project serves a need of a DAC?:		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Funding Match Waiver request?:		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		
Category		(a) Requested Grant Amount	(b) Cost Share: Non-State Fund Source* (Funding Match)	(c) Cost Share: Other State Fund Sources*	(d) Total
(a)	Direct Project Administration	\$0	\$6,323	\$0	\$6,323
	Task 1: Project Management	\$0	\$3,162	\$0	\$3,162
	Task 2: Labor Compliance Program	\$0	\$0	\$0	\$0
	Task 3: Reporting	\$0	\$3,162	\$0	\$3,162
(b)	Land Purchase / Easement	\$0	\$0	\$0	\$0
	Task 4: Land Purchase	\$0	\$0	\$0	\$0
(c)	Planning/ Design/ Environmental	\$0	\$398,747	\$0	\$398,747
	Task 5: Feasibility Studies	\$0	\$23,000	\$0	\$23,000
	Task 6: CEQA Documentation	\$0	\$4,475	\$0	\$4,475
	Task 7: Permitting	\$0	\$75,000	\$0	\$75,000
	Task 8: Design	\$0	\$293,743	\$0	\$293,743
	Task 9: Project Performance Monitoring Plan	\$0	\$2,529	\$0	\$2,529
(d)	Construction / Implementation	\$1,435,000	\$1,318,646	\$0	\$2,753,646
	Task 10: Contract Services	\$0	\$86,450	\$0	\$86,450
	Task 11: Construction Administration	\$0	\$86,450	\$0	\$86,450
	Task 12: Construction/Implementation	\$1,435,000	\$1,145,746	\$0	\$2,580,746
	12.1: CUP Reclaimed Water Cooling Tower Retrofit	\$0	\$863,000	\$0	\$863,000
	12.2: Air Handling Unit Condensate Collection and Reuse	\$400,000	\$261,865	\$0	\$661,865
	12.3: Water Conservation Community Outreach	\$75,000	\$0	\$0	\$75,000
	12.4: Turf Removal and Stormwater Treatment	\$800,000	\$6,104	\$0	\$806,104
	12.5: Modular Wetland Treatment System and Monitoring	\$74,560	\$14,777	\$0	\$89,337
	12.6: TRV Non-Point Source Pollution Reduction and Habitat Restoration	\$85,440	\$0	\$0	\$85,440
(e)	Grand Total	\$1,435,000	\$1,723,716	\$0	\$3,158,716
*List sources of funding: Funding match is provided by UCSD Environment, Health, and Safety Department funds, Physical Planning Department funds, and UCSD Facilities Management Purchased Utilities Budget (a mix of non-resident tuition revenue, indirect cost recovery, student services fees, and recharges to non-State customers).					

Row (a) Direct Project Administration Costs

Task 1: Project Management

Costs for project administration include time for UCSD staff to complete administrative duties. UCSD staff will dedicate 50 total hours to this task with a billing rate of \$63.23, for a total of \$3,162. Hourly rates include salary plus benefits, and does not include overhead.

Task 2: Labor Compliance Program (LCP)

Costs for implementing UCSD's ongoing Labor Compliance program are not included herein. UCSD requires all trade contractors to pay prevailing wages as established by the state of California through Labor Code, and to maintain certified payroll for said wages. This is a UC system-wide requirement and all construction contracts include this requirement in the contract language. The University of California has an approved LCP per DIR's online listing of LCPs.

Task 3: Reporting

Costs for project administration include time for UCSD staff to complete administrative duties. UCSD staff will dedicate 50 total hours to this task with a billing rate of \$63.23, for a total of \$3,162.

Row (b) Land Purchase/ Easement

Task 4: Land Purchase

Not applicable.

Row (c) Planning/ Design/ Engineering/ Environmental Documentation

Task 5: Feasibility Studies

The *Recycled Water Feasibility Study* was completed in November 2013 by the City of San Diego at no charge to UCSD. A draft of the *Air Handling Unit Condensate Collection and Reuse Feasibility Study* has been completed and is currently undergoing final reviews. This study cost was \$23,000 based on consultant invoices.

Task 6: CEQA Documentation

Categorical Exemptions were completed for Cooling Tower Retrofits (in April 2014), Turf Removal and Stormwater Treatment (in February 2015), and the Modular Wetland Treatment System (in February 2015), for a total cost of \$4,475. UCSD staff dedicated 40 hours of Assistant Director time at a billing rate of \$73.94/hr and 24 hours of Senior Planner time at a billing rate of \$63.23/hr (salary plus benefits).

Task 7: Permitting

All relevant permits have been acquired for the project components. An *Industrial Engineering Report for Recycled Water System* was completed for a total cost of \$65,500. This cost is based on consultant invoices. Preparation of the Notice of Intent for the General Construction Permit cost \$9,500. Total Task 7 costs are \$75,000.

Task 8: Design

Design costs for Components 1, 2, 3, and 4 were provided by consultant estimates and/or invoices. Total cost for this task is \$293,743. Design costs for the Cooling Tower Retrofits are \$35,500; design costs for the HVAC Condensate Reuse are \$107,750; design costs for the Turf Removal and Stormwater Treatment are \$123,693; and design costs for the Modular Wetland Treatment System are \$26,800.

Task 9: Project Performance Monitoring Plan

Costs for this task include time for UCSD staff to prepare the monitoring plan for the Cooling Tower Retrofit and for the Modular Wetland Treatment System. The proposed task budget of \$2,529 is based on 40 total hours of a Specialist III at billing rate of \$63.23/hr.

Row (d) Construction/Implementation

Task 10: Contract Services

Breakdown for the total task cost of \$86,450 includes \$47,950 for the Cooling Tower Retrofit and \$38,500 for the HVAC Condensate Reuse. Contract services cost is assumed to be approximately 5% of the relevant construction costs of the two project components, based on the consultant engineer estimate.

Task 11: Construction Administration

Breakdown for the total task cost of \$86,450 includes \$47,950 for the Cooling Tower Retrofit and \$38,500 for the HVAC Condensate Reuse. Contract administration cost is assumed to be approximately 5% of the relevant construction costs of the two project components, based on the consultant engineer estimate.

Task 12: Construction/Implementation

Breakdown for the total task cost of \$2,564,204 is provided in the table below, and are based on detailed estimates from consultants and contractors. For items without a bid or estimate, costs were based on project partners' experience implementing similar activities.

Table 4-22: Task 12 Costs for UCSD Water Conservation and Watershed Protection

	Deliverables/Activity	Hourly Rate/Unit Cost	Number of Hours/Units	Total Cost
<i>Subtask 12.1: CUP Reclaimed Water Cooling Tower Retrofit</i>				\$863,000
	General Requirements	Contractor estimate		\$20,800
	Plumbing	Contractor estimate		\$269,700
	HVAC	Contractor estimate		\$85,000
	Electrical	Contractor estimate		\$154,700
	Earthwork	Contractor estimate		\$52,200
	Site Improvements	Contractor estimate		\$129,900
	Jobsite Management, Insurance/Bonding, Contingency	4%-9% each		\$150,700
<i>Subtask 12.2: Air Handling Unit Condensate Collection and Reuse</i>				\$661,865
	General Requirements	\$90,000	1 unit	\$90,000
	Mechanical and Plumbing	\$323,800	1 unit	\$323,800
	Electrical and Controls	\$100,000	1 unit	\$100,000
	Soft Costs, Contingency	15% each		\$148,065
<i>Subtask 12.3: Water Conservation Community Outreach</i>				\$75,000
	Community Engagement/ Education Staff	\$85/hr	294.1	\$25,000
	Director staff (executive, policy, program)	\$125/hr	200	\$25,000
	Communication Contractor	\$63.25/hr	118.6	\$7,500
	Outreach events Contractor	\$28.75/hr	347.8	\$10,000
	Outreach supplies	Variable		\$7,500
<i>Subtask 12.4: Turf Removal and Stormwater Treatment</i>				\$806,104
	Turf Replacement and Bioswale Construction	21,500 sq ft turf, 1 swale		\$135,275
	Turf Replacement – Site requirements, jobsite management, insurance and bonding fee, contingency	Engineers estimate		\$119,552
	Stormwater – General Requirements, Utilities	Storm drainage connection		\$37,648
	Stormwater – Earthwork and Site Improvements	Grading and excavation, planting		\$375,690
	Stormwater – Site requirements, jobsite management, insurance and bonding fee, contingency	Engineers estimate		\$137,939
<i>Subtask 12.5: Modular Wetland Treatment System and Monitoring</i>				\$89,337
	Journeyman and General Forman	Avg. \$82.39/hr	182 hours	\$15,000
	Treatment system materials and equipment	\$60,184 for materials, \$2,500 for equipment		\$62,684
	Contingency and markup	15% of construction costs		\$11,653
<i>Subtask 12.6: TRV Non-Point Source Pollution Reduction and Habitat Restoration</i>				\$85,440
	WildCoast Staff	\$22/hr	500 hours	\$11,000
	TRNERR Staff	\$26/hr	540 hours	\$14,040
	Urban Corps Crew (Supervisor + 10 Crew Members)	\$2,320/day	15 days	\$34,800
	Plants, Irrigation Supplies, Mulch, Tools	\$4,000/site	1 site	\$4,000
	WildCoast Cleanup Cost	\$1,800/event	12 events	\$21,600
Task 12 Total				\$2,580,746

Project 8: Escondido Advanced Water Treatment for Agriculture

Local Project Sponsor: City of Escondido

Partners: Escondido Growers for Agricultural Preservation (EGAP), Vista Irrigation District, City of San Diego, and Rincon Del Diablo Water District

A project summary budget table consistent with Table 8 in the PSP is provided below as **Table 4-23** for the *Escondido Advanced Water Treatment for Agriculture* project. This project has a 90% funding match.

Table 4-23: Total Project Budget for Escondido Advanced Water Treatment for Agriculture

Proposal Title: San Diego 2015 IRWM Implementation Grant Proposal					
Project Title: Escondido Advanced Water Treatment for Agriculture					
Project serves a need of a DAC?:		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Funding Match Waiver request?:		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		
Category		(a) Requested Grant Amount	(b) Cost Share: Non-State Fund Source* (Funding Match)	(c) Cost Share: Other State Fund Sources*	(d) Total
(a)	Direct Project Administration	\$0	\$131,936	\$0	\$131,936
	Task 1: Project Management	\$0	\$23,520	\$0	\$23,520
	Task 2: Labor Compliance Program	\$0	\$84,000	\$0	\$84,000
	Task 3: Reporting	\$0	\$24,416	\$0	\$24,416
(b)	Land Purchase/ Easement	\$0	\$0	\$0	\$0
	Task 4: Land Purchase	\$0	\$0	\$0	\$0
(c)	Planning/ Design/ Environmental	\$0	\$1,624,090	\$0	\$1,624,090
	Task 5: Feasibility Studies	\$0	\$300,000	\$0	\$300,000
	Task 6: CEQA Documentation	\$0	\$71,330	\$0	\$71,330
	Task 7: Permitting	\$0	\$105,000	\$0	\$105,000
	Task 8: Design	\$0	\$1,136,000	\$0	\$1,136,000
	Task 9: Project Performance Monitoring Plan	\$0	\$11,760	\$0	\$11,760
(d)	Construction/ Implementation	\$2,000,000	\$15,831,743	\$0	\$17,831,743
	Task 10: Contract Services	\$0	\$28,000	\$0	\$28,000
	Task 11: Construction Administration	\$0	\$212,000	\$0	\$212,000
	Task 12: Construction/Implementation	\$2,000,000	\$15,591,743	\$0	\$17,591,743
	12.1: Mobilization and Insurance	\$0	\$514,118	\$0	\$514,118
	12.2: Yard Piping and Sitework	\$0	\$1,409,576	\$0	\$1,409,576
	12.3: MFRO Process Building	\$2,000,000	\$6,901,165	\$0	\$8,901,165
	12.4: Inter Process Storage Tank	\$0	\$412,231	\$0	\$412,231
	12.5: Chemical Storage Building	\$0	\$4,664,553	\$0	\$4,664,553
	12.6: Product Water Storage and MF Feed Tanks	\$0	\$1,324,225	\$0	\$1,324,225
	12.7: HARRF Improvements	\$0	\$13,301	\$0	\$13,301
	12.8: Project Closeout	\$0	\$352,574	\$0	\$352,574
(e)	Grand Total	\$2,000,000	\$17,587,769	\$0	\$19,587,769
<p>*List sources of funding: Funding match sources include the City's Utility Enterprise Fund (Water and Wastewater). The City has adopted a resolution identifying rates as the pledge revenue for this match funding. The City is in the process of applying for a construction loan from the State Revolving Fund (SRF) to be supported by a rate increase. City Commission Resolution Number 2014-135 (a resolution authorizing the Utilities Director or his designee, to be the City's representative for the SRF Loan Program) and City Commission Resolution Number 2015-17R (a resolution establishing new water and wastewater service rates, charges and fees; authorizing future pass through of wholesale water and inflation charges; and reducing fees for past due notices). Should this SRF loan be approved, the City recognizes that some of these funds may not be eligible as funding match, and would ensure that 25% of total project costs are funded by non-State sources.</p>					

Row (a) Direct Project Administration Costs

Task 1: Project Management

City of Escondido staff will spend 168 hours (12 hours per month for 14 months) by an Engineer at a billing rate of \$140/hr completing project management activities. Total costs are \$23,520. Hourly rates were calculated based on salary plus benefits, and no overhead is included.

Task 2: Labor Compliance Program (LCP)

Costs associated with labor compliance include time required by a City staff to submit and manage a LCP, which is assumed as 560 hours (40 hours per month for 14 months) by a Senior Engineer (\$150/hr), for a total of \$84,000.

Task 3: Reporting

The City and its consultant will prepare quarterly project progress reports and project completion report at an estimated cost of \$24,416 based on 112 hours (8 hours per month for 14 months) at a billing rate of \$218/hr.

Row (b) Land Purchase/ Easement

Task 4: Land Purchase

Not applicable.

Row (c) Planning/ Design/ Engineering/ Environmental Documentation

Task 5: Feasibility Studies

The City completed the feasibility study for this project (*MFRO Facility for Agriculture, Basis of Design Report*) in 2014 at a cost of \$300,000. This cost is based on the consultant contract and invoices.

Task 6: CEQA Documentation

The City and its consultant are currently preparing an MND for the project, for a total contract fee of \$71,330.

Task 7: Permitting

A total of \$105,000 is anticipated for obtaining the required permits for this projects, including:

1. NPDES permit amendment for the brine discharge,
2. Water Quality Certification from the San Diego Regional Water Quality Control Board,
3. Construction General Permit from State Water Board, and
4. Various City's Public Works permits for construction activities.

Associated permit cost is based on 5 permit applications (3 large efforts, plus 2 Public Works permits), for 150 hours of City staff time per permit at an Engineer billing rate of \$140/hr. This estimate is based on City's past experience with obtaining these permits.

Task 8: Design

Conceptual Design (\$86,000) and Pre-Engineering Report (\$300,000) of the MFRO facility have been completed. The MFRO Facility final design (\$750,000) is underway with expected completion November 2015. Total design cost is \$1,136,000, based on consultant contracts and invoices.

Task 9: Project Performance Monitoring Plan

This task will be completed by City staff. Estimated effort is based on similar experiences and is anticipated to require 84 hours of City staff time at an Engineer billing rate of \$140/hr, totaling at \$11,760.

Row (d) Construction/Implementation

Task 10: Contract Services

Contract services will involve 200 hours of a City Engineer (\$140/hr), for a total cost of \$28,000.

Task 11: Construction Administration

This task will be completed by City staff. Construction administration is assumed to be \$212,000, which is 1.2% of the construction cost (\$17,591,743) for this 14 month effort. Industry Standard allows for a range 1 to 1.5% of construction cost for a project of this value and complexity.

Task 12: Construction/Implementation

Cost breakdown for this task is provided in the table below. Estimated costs are based on a consulting engineering cost estimate developed in collaboration with City staff.

Table 4-24: Task 12 Costs for Escondido Advanced Water Treatment for Agriculture

	Deliverables/Activity	Hourly Rate/Unit Cost	Number of Hours/Units	Total Cost
Subtask 12.1: Mobilization and Insurance				\$514,118
	Mobilization and insurance costs	3% of construction cost		\$514,118
Subtask 12.2: Yard Piping and Sitework				\$1,409,576
	Electrical, Instrumentation, and Control	Engine-generators, transformers		\$381,118
	Earthwork and Site Improvements	Cut/fill, clearing, surfacing, curb/gutter		\$556,111
	Process Piping	Variable		\$472,347
Subtask 12.3: MFRO Process Building				\$8,901,165
	MFRO Process Building	Concrete, masonry, roofing, plumbing, HVAC, electrical		\$2,434,740
	Earthwork and Site Improvements	Cut/fill, clearing, surfacing, curb/gutter		\$695,600
	Process Piping	Variable		\$570,825
	RO Transfer Pumps	\$45,000	4 pumps	\$190,000
	MF System	\$2,640,000	1 MF system	\$2,640,000
	RO System	\$2,370,000	1 RO system	\$2,370,000
Subtask 12.4: Inter Process Storage Tank				\$412,231
	Concrete	Walls, slab, equipment pad		\$375,672
	Earthwork	Excavation cut/fill		\$36,559
Subtask 12.5: Chemical Storage Building				\$4,664,553
	Chemical Storage Building	Concrete, masonry, roofing, plumbing, HVAC, electrical		\$2,094,553
	Earthwork and Site Improvements	Cut/fill, clearing, surfacing, curb/gutter		\$681,518
	Process Piping	Variable		\$1,123,482
	Agricultural Pumps	\$120,000	5 pumps	\$600,000
	MF Feed Pumps	\$55,000	3 pumps	\$165,000
Subtask 12.6: Product Water Storage and MF Feed Tanks				\$1,324,225
	Concrete	Walls, slab, equipment pad		\$1,191,691
	Earthwork	Excavation cut/fill		\$132,534
Subtask 12.7: HARRF Improvements				\$13,301
	Electrical and Instrumentation	Panel, router, cabling		\$13,301
Subtask 12.8: Project Closeout				\$352,574
	Overall Project Closeout	Variable		\$352,574
Task 12 Total				\$17,591,743

Project 9: Padre Dam Advanced Water Treatment – Phase IA Expansion

Local Project Sponsor: Padre Dam Municipal Water District (Padre Dam MWD)

Partner: Helix Water District, County of San Diego, and City of El Cajon

A project summary budget table consistent with Table 8 in the PSP is provided below as **Table 4-25** for the *Padre Dam Advanced Water Treatment – Phase IA Expansion*. This project has a 25% funding match.

Table 4-25: Total Project Budget for Padre Dam Advanced Water Treatment – Phase IA Expansion

Proposal Title: San Diego 2015 IRWM Implementation Grant Proposal					
Project Title: Padre Dam Advanced Water Treatment – Phase IA Expansion					
Project serves a need of a DAC?:		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		
Funding Match Waiver request?:		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		
		(a)	(b)	(c)	(d)
Category		Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Sources*	Total
(a)	Direct Project Administration	\$0	\$696,092	\$0	\$696,000
	Task 1: Project Management	\$0	\$650,010	\$0	\$650,010
	Task 2: Labor Compliance Program	\$0	\$6,045	\$0	\$6,045
	Task 3: Reporting	\$0	\$40,037	\$0	\$40,037
(b)	Land Purchase/ Easement	\$0	\$0	\$0	\$0
	Task 4: Land Purchase	\$0	\$0	\$0	\$0
(c)	Planning/ Design/ Environmental	\$300,000	\$1,532,001	\$0	\$1,832,001
	Task 5: Feasibility Studies	\$300,000	\$231,000	\$0	\$531,000
	Task 6: CEQA Documentation	\$0	\$200,001	\$0	\$200,001
	Task 7: Permitting	\$0	\$200,000	\$0	\$200,000
	Task 8: Design	\$0	\$891,000	\$0	\$891,000
	Task 9: Project Performance Monitoring Plan	\$0	\$10,000	\$0	\$10,000
(d)	Construction/ Implementation	\$5,700,000	\$6,554,154	\$21,506,300	\$33,760,454
	Task 10: Contract Services	\$0	\$84,400	\$0	\$84,400
	Task 11: Construction Administration	\$0	\$1,869,714	\$0	\$1,869,714
	Task 12: Construction/Implementation	\$5,700,000	\$5,000,000	\$21,106,300	\$31,806,300
	12.1: Design/Build - Final Design	\$0	\$0	\$2,081,000	\$2,081,000
	12.2: Design/Build - IPS Expansion	\$0	\$0	\$9,063,000	\$9,063,000
	12.3: Design/Build - WRF Expansion	\$5,700,000	\$5,000,000	\$9,962,300	\$20,662,300
(f)	Grand Total	\$6,000,000	\$9,182,247	\$21,106,300	\$36,288,547
<p>*List sources of funding: Funding match will be provided through a combination of U.S. Bureau of Reclamation Title XVI and WaterSmart grants, local agency funds and in-kind services, and a Padre Dam MWD secured funds. This project falls within an authorized Title XVI project and is therefore eligible for Title XVI dollars. Additional state funds will be pursued through the State Revolving Fund (SRF) program. Padre Dam MWD recognizes that these additional state dollars do not contribute towards local match, and they are included here in Column C.</p>					

Row (a) Direct Project Administration Costs

Task 1: Project Management

Padre Dam MWD staff will perform project management tasks. The cost estimate is based on 1,500 hours of a Project Manager at a billing rate of \$104/hr, 3,700 hours of a Staff Engineer at a billing rate of \$88/hr, and 3,062 hours of an Accountant at a billing rate of \$55/hr. Hourly rates are based on salary plus benefits, and do not include overhead. Total costs for project management are anticipated to be \$650,010, which equal less than 2% of the total project cost.

Task 2: Labor Compliance Program (LCP)

Costs associated with labor compliance include time required by a consultant to submit and manage a LCP, which is assumed as 10 hours of Project Manager work at a billing rate of \$104/hr, 30 hours of Staff Engineer work at a billing rate of \$88/hr, and 43 hours of Accountant work at a billing rate of \$55/hr. The Task 2 total is \$6,045.

Task 3: Reporting

Padre Dam MWD staff will perform reporting tasks. The cost estimate is based on 160 hours of a Project Manager at a billing rate of \$104/hr, 219 hours of a Staff Engineer at a billing rate of \$88/hr, and 75 hours of an Accountant at a billing rate of \$55/hr. The Task 3 total is \$40,037.

Row (b) Land Purchase/ Easement

Task 4: Land Purchase

Not applicable – Land acquisition is not required for this project.

Row (c) Planning/ Design/ Engineering/ Environmental Documentation

Task 5: Feasibility Studies

Costs for the Ray Stoyer WRF Facility Planning Study and the Lake Jennings Hydrodynamic and Water Quality Modeling total \$531,000. The *Ray Stoyer WRF Facility Planning Study* was completed in July 2014 and its cost is based on actual expenditures. Consultants will be contracted to conduct the reservoir modeling; associated costs (\$500,000) are based on cost of previous similar scoped studies completed by other agencies.

Task 6: CEQA Documentation

Padre Dam MWD is currently preparing revisions to a Draft Mitigated Negative Declaration (MND) for the project that was completed in 2009. CEQA documentation is being completed by consultants (contracted fee of \$152,625) and Padre Dam MWD staff. Padre Dam MWD staff budget of \$47,380 is estimated based on 200 hours of a Project Manager at a billing rate of \$104/hr, and 302 hours of a Staff Engineer at a billing rate of \$88/hr. Total cost for this task is anticipated to be \$200,001.

Task 7: Permitting

A total of \$200,000 is anticipated for obtaining the required permits for this projects including; \$180,000 for NPDES and WDRs for Ray Stoyer WRF, \$7,000 for Construction General Permit with SWPPP, \$4,000 for County of San Diego Construction Permit, \$5,000 for City of Santee Building and Traffic Control Permit, and \$4,000 for San Diego AQMD Construction Permit. Associated permit costs are based on Padre Dam MWD's past experience with obtaining these permits.

Task 8: Design

The Ray Stoyer WRF expansion will be completed through a Design/Build construction method. Therefore, only 10% design package will be prepared under this task as a bridging document for bidding. Cost of the 10% design package (\$815,000) is assumed to be 3% of the construction cost. In addition, a Geotechnical Report will be prepared by a consultant at an estimated cost of \$76,000. This cost is based on Padre Dam MWD's past experience for contracting a geotechnical firm for similar scope projects. Total Task 8 costs are \$891,000.

Task 9: Project Performance Monitoring Plan

This task will be completed by the Padre Dam MWD staff. Estimated effort cost is based on 42 hours of Project Manager at a billing rate of \$104/hr and 64 hours of Staff Engineer work at a billing rate of \$88/hr, totaling at \$10,000.

Row (d) Construction/Implementation

Task 10: Contract Services

Surveying and post construction Geotechnical Report will be prepared by consultants at an estimated cost of \$8,000 and \$25,000, respectively. Other listed contract services will be completed by the Padre Dam MWD staff. Estimated effort cost is based on 234 cumulative hours of Project Manager at a billing rate of \$104/hr and 308 cumulative hours of Staff Engineer work at a billing rate of \$88/hr, for a total of \$51,400. Total costs are \$84,440.

Task 11: Construction Administration

This task will be completed by a consultant and Padre Dam MWD staff. Construction administration by the consultant is assumed to be 5% of the construction cost (\$1,485,714). Padre Dam MWD effort is estimated based on 2,000 hours of Project Manager at a billing rate of \$104/hr and 2,000 hours of Staff Engineer work at a billing rate of \$88/hr, totaling at \$384,000. Total Task 11 costs are \$1,896,714.

Task 12: Construction/Implementation

Cost breakdown for Task 12 is provided in the table below. Since the construction will be done using D/B construction methods, final design will be completed under this task. Final design cost is assumed to be 6.5% of the construction cost, based on engineering cost estimate. Estimated IPS and WRF expansion cost estimates are based on engineering cost estimates from a consultant and includes 25% and 30% contingency, respectively.

Table 4-26: Task 12 Costs for Padre Dam Advanced Water Treatment – Phase IA Expansion

	Deliverables/Activity	Hourly Rate/Unit Cost	Number of Hours/Units	Total Cost
<i>Subtask 12.1 – Design/Build - Final Design</i>				<i>\$2,081,000</i>
	100% Design for IPS and WRF Expansion	6.5% of construction cost		\$2,081,000
<i>Subtask 12.2 – Design/Build - IPS Expansion</i>				<i>\$9,063,000</i>
	Low lift pumps	\$250,000/mgd	22.5 mgd capacity	\$5,625,000
	High lift pumps	\$250,000/mgd	6.5 mgd capacity	\$1,625,000
	Construction Contingency	25%		\$1,813,000
<i>Subtask 12.3 – Design/Build - WRF Expansion</i>				<i>\$20,662,300</i>
	Headworks – 6 mgd capacity	2 grit chambers, 1 screen		\$4,017,000
	Primary Clarifiers – 3.1 mgd capacity	740 cy concrete, fiberglass troughs, tank covers, clarifier mechanism, scum skimmer, sludge pumps, piping		\$4,303,870
	Flow Equalization Basin – 0.8 MG capacity	1,218 cy concrete, 36 hp pump, piping		\$3,187,110
	Aeration Basin Rehabilitation/Conversion – 6.6 mgd capacity	Fiberglass baffles, slide gates, mixers, bubble diffusers, 121 hp pump, piping		\$3,362,150
	Secondary Clarifiers – 3.4 mgd capacity	741 cy concrete, fiberglass troughs, clarifier mechanism, scum skimmer, 73 hp pump, piping		\$4,698,680
	Tertiary Filters–1.0 mgd capacity	Concrete, filter media, equipment		\$1,093,490
	Fanita Ranch – Connection, 12 miles distribution pipeline, additional pump	Costs will be borne by Fanita Ranch developer and are not included herein		N/A
Task 12 Total				\$31,806,300

Project 10: Safari Park Drought Response and Outreach

Local Project Sponsor: Zoological Society of San Diego

Partners: San Diego Unified School District, San Diego County Office of Education, and San Diego County Water Authority (SDCWA)

A project summary budget table consistent with Table 8 in the PSP is provided below as **Table 4-27** for the *Safari Park Drought Response and Outreach* project. This project provides a 25% funding match.

Table 4-27: Total Project Budget for Safari Park Drought Response and Outreach

Proposal Title: San Diego 2015 IRWM Implementation Grant Proposal					
Project Title: Safari Park Drought Response and Outreach					
Project serves a need of a DAC?:		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Funding Match Waiver request?:		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		
		(a)	(b)	(c)	(d)
Category		Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Sources*	Total
(a)	Direct Project Administration	\$28,436	\$4,577	\$0	\$33,013
	Task 1: Project Management	\$5,958	\$0	\$0	\$5,958
	Task 2: Labor Compliance Program	\$22,478	\$0	\$0	\$22,478
	Task 3: Reporting	\$0	\$4,577	\$0	\$4,577
(b)	Land Purchase/ Easement	\$0	\$0	\$0	\$0
	Task 4: Land Purchase	\$0	\$0	\$0	\$0
(c)	Planning/ Design/ Environmental	\$453,394	\$0	\$0	\$453,394
	Task 5: Feasibility Studies	\$125,110	\$0	\$0	\$125,110
	Task 6: CEQA Documentation	\$10,020	\$0	\$0	\$10,020
	Task 7: Permitting	\$10,030	\$0	\$0	\$10,030
	Task 8: Design	\$305,998	\$0	\$0	\$305,998
	Task 9: Project Performance Monitoring Plan	\$2,236	\$0	\$0	\$2,236
(d)	Construction/ Implementation	\$2,418,170	\$962,423	\$0	\$3,380,593
	Task 10: Contract Services	\$26,455	\$78,392	\$0	\$104,847
	Task 11: Construction Administration	\$48,270	\$0	\$0	\$48,270
	Task 12: Construction/Implementation	\$2,343,445	\$884,031	\$0	\$3,227,476
	12.1: Construction	\$2,270,780	\$218,876	\$0	\$2,489,656
	12.2: Prepare O&M Manuals and As-builts	\$10,040	\$0	\$0	\$10,040
	12.3: Public Outreach and Water Education	\$0	\$665,155	\$0	\$665,155
	12.4: Turf Conversion	\$62,625	\$0	\$0	\$62,625
(e)	Grand Total	\$2,900,000	\$967,000	\$0	\$3,867,000
*List sources of funding: Other sources of funding for <i>Task 12: Construction/Implementation</i> include Price Philanthropies Foundation, Bank of America Charitable Foundation, Issa Family Foundation, Hunter Industries, Hans and Margaret Doe Charitable Trust, Lucille Ellis Simon Foundation, Paula B. and Oliver W. Jones Family Foundation, Meglbagl Foundation, San Diego Foundation, Georges and Germaine Fusenot Charity Foundation, Safari Park Expense Budget, and Safari Park Labor Budget. Funding match for <i>Task 3: Reporting</i> , <i>Task 6: CEQA Documentation</i> , and <i>Task 10: Contract Services</i> is Safari Park's Labor Budget.					

Row (a) Direct Project Administration Costs

Task 1: Project Management

Zoological Society of San Diego staff will perform these tasks. The cost estimate is based on 50 hours of an Architect at \$83/hr, and 40 hours of a Senior Accountant at \$45/hr. Hourly rates are calculated based on salary plus benefits. Costs for this task are \$5,958.

Task 2: Labor Compliance Program (LCP)

Costs associated with the LCP include time for a consulting company to support performing LCP tasks for a total fee of \$22,477. This fee estimate is based on 208 hours of Senior Analyst at \$85/hr and 72 hours of Jobsite Interviewer at \$57/hr.

Task 3: Reporting

Costs for reporting include time required by Zoological Society staff to complete reporting duties. An Architect with a billing rate of \$83 per hour will dedicate 55 hours towards this task for a total of \$4,577.

Row (b) Land Purchase/ Easement

Task 4: Land Purchase

Land acquisition is not required for this project.

Row (c) Planning/ Design/ Engineering/ Environmental Documentation

Task 5: Feasibility Studies

Total cost for this task is \$125,110 for the *WWTP Effluent Characterization and Basis of Design Report* (\$85,050), *Safari Park Water Master Plan Update* (\$24,980), and *Salt and Nutrient Management Plan* (\$15,080), and these activities will be completed by consultants. Cost estimates are based on the consultant fee proposal.

Task 6: CEQA Documentation

The project falls under the existing Safari Park Future Construction Program Resource Protection Ordinance (RPO) Permit and associated EIR. An amendment to the RPO will be completed for \$10,020 based on 14 hours of a Senior Engineer at \$230/hr and 40 hours of an Engineer at a \$170/hr. No additional CEQA is required.

Task 7: Permitting

A total of \$10,030 is anticipated for obtaining the required permits for this projects including; a permit from SWRCB for Tertiary WWTP and a permit from RWQCB for redistribution of recycled water for irrigation at Safari Park. Costs are based on 20 hours of a Senior Engineer at \$230/hr, 30 hours of an Engineer at \$170/hr, and 3 hours of an Administrator at \$110/hr.

Task 8: Design

Total cost for design is \$305,998, and includes design plans, specifications, and estimates (\$220,030); electrical, geotechnical, and survey evaluations (\$70,000); planning and design meetings (\$3,968); and turf replacement design (\$12,000). Costs are based on the consultant fee proposals and hourly rates of Safari Park staff and the hours estimated for planning and design meetings.

Task 9: Project Performance Monitoring Plan

This task will be completed by the Zoological Society staff. Estimated effort is 20 hours of Architect work at a billing rate of \$83/hr, 10 hours of Architect Assistant work at a billing rate of \$33/hr, and 5 hours of C&M Supervisor work at a billing rate of \$48/hr, totaling at \$2,236.

Row (d) Construction/Implementation

Task 10: Contract Services

Cost break down for this task includes \$26,455 for materials testing and inspection services, along with \$78,392 for SCADA upgrades. Cost estimates are based on a consultant fee proposal.

Task 11: Construction Administration

This task will be completed by the Zoological Society of San Diego staff for a total estimated cost of \$48,270. The estimate is based on 80 hours of Senior Engineer work at \$230/hr, 60 hours of Engineer work at \$170/hr, 12 hours of Administrator work at \$110/hr, 72 hours of Architect work at \$83/hr, 72 hours of Architectural Assistant work at \$33/hr, 108 hours of C&M Supervisor work at \$48/hr, and 108 hours of Lead C&M D Step work at \$44/hr.

Task 12: Construction/Implementation

Cost breakdown for this task is provided in the table below. Estimated costs are based on engineering cost estimate and includes 20% construction contingency.

Table 4-28: Task 12 Costs for Safari Park Drought Response and Outreach

	Deliverables/Activity	Hourly Rate/Unit Cost	Number of Hours/Units	Total Cost
<i>Subtask 12.1 – Construction</i>				\$2,489,656
	MBR structure, equipment, piping, electrical, instrumentation, controls	Pipe, electrical equipment, materials	80,000 GDP	\$880,000
	RO membrane treatment of HOA Pond water	\$7.00/GDP	50,000 GDP	\$350,000
	Upgrade Existing WWTP to Support Tertiary Operation	\$0.75/GDP	80,000 GDP	\$60,000
	4" brine discharge pipeline	\$30.00/LF	1,500 LF	\$45,000
	Brine evaporation pond construction	\$1.20/SF	120,000 SF	\$144,000
	Increase HOA Pond storage and intake structure	\$0.50/SF plus 1 LS	43,560 plus 1 LS	\$31,980
	Low head from East Africa Pond to HOA Pond	\$30,000/HP	0.5	\$15,000
	Pump from HOA Pond to WWTP-equipment	\$30,000/HP	1.0	\$30,000
	Pump installations - labor	\$43.10	650	\$27,998
	Pipeline from HOA Pond to WWTP and from WWTP to HOA Pond	\$35.00/LF of 4" PVC pipe	600	\$21,000
	Irrigation line conversions - materials	Pipes, fittings, wire, glue, conduit, paint, controllers		\$160,533
	Irrigation line conversions- equipment, supplies	Equipment rentals, irrigation supplies		\$102,396
	Irrigation line conversions - labor	\$38.58 - \$44.18	1340	\$51,846
	Irrigation system conversions- labor	\$43.10	2635	\$113,579
	Contingency	Approx. 20% Construction Contingency		\$456,324
<i>Subtask 12.2 – Prepare O&M Manuals and As-builts</i>				\$10,040
	Prepare As-builts and O&M Manuals	\$170.00 - \$230.00	52	\$10,040
<i>Subtask 12.3 – Public Outreach and Water Education Programs</i>				\$665,155
	Water Conservation Education Program - materials	Props, Testing kits, Visual aids, Microscopes, Test tubes, Student booklets		\$297,667
	Safari Park Maps/Schedules	\$0.03/map	800,000	\$20,800
	Water Conservation Education Program and Public Outreach	\$18.20 - \$150.00	11,026	\$346,688
<i>Subtask 12.4 – Turf Conversion</i>				\$62,625
	Xerophytic Plantings and Mulch	0.375/ sq ft	167,000 sq ft	\$62,625
Task 12 Total				\$3,227,476

Water Quality and Habitat Program

Project 11: San Diego River Healthy Headwaters Restoration

Local Project Sponsor: USDA Forest Service (USFS)

Partners: American Conservation Experience (ACE), City of San Diego, Back Country Land Trust (BCLT), San Diego River Park Foundation (SDRPF), San Diego River Conservancy, Animal and Plant Health Inspection Service (APHIS), and County of San Diego

A project summary budget table consistent with Table 8 in the PSP is provided below as **Table 4-29** for the *San Diego River Healthy Headwaters Restoration* project. The project has a 30% funding match.

Table 4-29: Total Project Budget for San Diego River Healthy Headwaters Restoration

Proposal Title: <i>San Diego 2015 IRWM Implementation Grant Proposal</i>					
Project Title: San Diego River Healthy Headwaters Restoration					
Project serves a need of a DAC?:		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Funding Match Waiver request?:		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		
Category		(a) Requested Grant Amount	(b) Cost Share: Non-State Fund Source* (Funding Match)	(c) Cost Share: Other State Fund Sources*	(d) Total
(a)	Direct Project Administration	\$42,000	\$0	\$0	\$42,000
	Task 1: Project Management	\$11,000	\$0	\$0	\$11,000
	Task 2: Labor Compliance Program	\$10,000	\$0	\$0	\$10,000
	Task 3: Reporting	\$21,000	\$0	\$0	\$21,000
(b)	Land Purchase/ Easement	\$0	\$0	\$0	\$0
	Task 4: Land Purchase	\$0	\$0	\$0	\$0
(c)	Planning /Design/ Environmental	\$5,000	\$125,000	\$0	\$130,000
	Task 5: Feasibility Studies	\$0	\$0	\$0	\$0
	Task 6: CEQA Documentation	\$0	\$24,000	\$0	\$24,000
	Task 7: Permitting	\$0	\$1,000	\$0	\$1,000
	Task 8: Design	\$0	\$100,000	\$0	\$100,000
	Task 9: Project Performance Monitoring Plan	\$5,000	\$0	\$0	\$5,000
(d)	Construction/ Implementation	\$2,069,000	\$804,000	\$0	\$2,873,000
	Task 10: Contract Services	\$0	\$0	\$0	\$0
	Task 11: Construction Administration	\$237,000	\$0	\$0	\$237,000
	Task 12: Construction/Implementation	\$1,832,000	\$804,000	\$0	\$2,636,000
	12.1: Invasive Weed Treatment	\$1,171,000	\$230,000	\$0	\$1,401,000
	12.1A: Catchment Wide Strategic Treatment Plan Implementation	\$286,000	\$0	\$0	\$286,000
	12.1B: Alpine Watershed Invasive Weed Treatment	\$475,000	\$125,000	\$0	\$600,000
	12.1C: USFS Invasive Weed Treatment	\$120,000	\$70,000	\$0	\$190,000
	12.1D: SDRFP Outreach, Education, and Invasive Weed Treatment	\$290,000	\$35,000	\$0	\$325,000
	12.2: Impacted Site Management and Restoration	\$596,000	\$300,000	\$0	\$896,000
	12.3: Invasive Wildlife Species Removal	\$65,000	\$274,000	\$0	\$339,000
(e)	Grand Total	\$2,116,000	\$929,000	\$0	\$3,045,000
*List sources of funding: Funding sources include: 1) USFS: Fire settlement funds, appropriated funds; 2) ACE: non-state funding, in-kind match; 3) SDRPF: volunteer hours; 4) City of San Diego: appropriated funds; and 5) BCLT: volunteer time, 2 nd Chance, SDG&E grants, TSDF grants, in-kind, BCLT reserves.					

Row (a) Direct Project Administration Costs

Task 1: Project Administration

Costs for project administration include time to complete administrative duties. Consulting staff will dedicate 110 hours to this task with a rate of \$100 per hour. Hourly rates were calculated based on based past consultant contracts for similar services. Task 1 costs total \$11,000.

Task 2: Labor Compliance Program (LCP)

Costs include development and implementation, if applicable, of a labor compliance program. Consulting staff will dedicate 100 hours to this task at a billing rate of \$100 per hour (based past consultant contracts), totaling \$10,000.

Task 3: Reporting

Costs for reporting include time to complete grant reporting duties. Consulting staff will dedicate 180 hours to this task at a billing rate of \$100 per hour (based past consultant contracts). USFS staff will dedicate 60 hours at an average rate of \$50 per hour. USFS staff hourly rates were calculated based on salary plus benefits, and overhead is not included. Task 3 costs total \$21,000.

Row (b) Land Purchase/ Easement

Task 4: Land Purchase

Not applicable.

Row (c) Planning/ Design/ Engineering/ Environmental Documentation

Task 5: Feasibility Studies

Not applicable.

Task 6: CEQA Documentation

Costs associated with this task include completing and filing remaining CEQA and NEPA compliance documents, with 480 hours of USFS staff at an average rate of \$50 per hour (salary plus benefits). Task 6 costs total \$24,000.

Task 7: Permitting

Costs associated with this task include coordination with San Diego River Conservancy to obtain annual permits under U.S. Army Corps of Engineers (USACE) Regional General Permit (RGP) 41. USFS staff will dedicate 20 hours at an average rate of \$50 per hour. Task 7 costs total \$1,000.

Task 8: Design

Development of the *El Capitan Reservoir Catchment Invasive Weeds Strategic Treatment Plan* requires City staff at a rate of \$225 per hour dedicating 16 hours, plus City staff at a rate of \$70 per hour dedicating 18 hours. Additionally, GIS specialists will spend 221 hours at a rate of \$143 per hour and 543 hours at a rate of \$72 per hour. An environmental planner will spend 181 hours at a rate of \$135 per hour. Finally, other direct costs will total \$141. Total cost for development of the Strategic Treatment Plan will be \$100,000.

Task 9: Project Performance Monitoring Plan

Consulting staff will spend 43 hours at a rate of \$100 per hour and USFS staff will spend 14 hours at a rate of \$50 per hour in this task. Total costs for Task 9 are \$5,000.

Row (d) Construction/Implementation

Task 10: Contract Services

Not applicable.

Task 11: Construction Administration

USFS staff will spend 320 hours at a rate of \$50 per hour and a consultant will spend 2,170 hours at a rate of \$100 per hour in construction management. Additionally, construction and site visits will require field vehicle use for 129 days at a rate of \$31 per day. Total costs for Task 11 include \$237,000.

Task 12: Construction/Implementation

Costs on this task include all labor, materials and equipment for pre- and post-construction activities, plus public education and outreach. Estimates are supported by past work completed.

Table 4-30: Task 12 Costs for San Diego River Healthy Headwaters Restoration

	Deliverables/Activity	Hourly Rate/Unit Cost	Number of Hours/Units	Total Cost
Subtask	12.1 Invasive Weed Treatment			\$1,401,000
City	12.1A: Catchment Wide Strategic Treatment Plan Implementation			\$286,000
	Consultant estimate for invasive weed treatment	\$25,000 per acre	11.4 acres	\$286,000
BCTL	12.1B: Alpine Watershed Invasive Weed Treatment			\$600,000
	Non-Native Removal and Habitat Restoration	Herbicide Treatment; Project Equipment and Insurance		\$490,000
	Public Education and Outreach	Town Hall Meetings; Secure Right of Entry for 40 landowners		\$50,000
	Dept. of Pesticide Regulation	QAC Licensing and Education		\$6,000
	Mulching of non-native biomass	Greater Alpine Fire Safe Council		\$18,000
	Water quality testing – Monthly sampling	\$5,000/site	3 sites within Catchment Area	\$15,000
	Maintenance of treated sites			\$21,000
USFS	12.1.C: USFS Invasive Weed Treatment			\$190,000
	Materials and equipment	Variable		\$35,000
	USFS Staff	\$50 per hour	160 hours	\$8,000
	ACE – Initial treatment and re-entry	\$14.75 per hour	7,254 hours	\$107,000
	Contractor – Tamarisk treatment	Contract value		\$40,000
SDRPF	12.1.D: SDRPF Outreach, Education, and Invasive Weed Treatment			\$325,000
	Invasive plant removal	\$26 per hour	2,038 hours	\$53,000
		Equipment purchase and rental		\$10,000
	Public education and outreach	\$30 per hour	2,167 hours	\$65,000
		Printing and delivery, handbook		\$26,000
	Targeted mapping of private property	\$31 per hour	5518 hours	\$171,000
Subtask	12.2 Impacted Site Management and Restoration			\$896,000
ACE	Impacted Site Restoration	Materials and equipment (in-kind)		\$250,000
	ACE – Initial treatment and re-entry	\$14.75 per hour	33,220 hours	\$490,000
	Restoration materials, labor	Wattles, erosion control, lumber, fencing, rock		\$46,000
	Aerial drops for restoration materials	\$5,000 each	2 drops	\$10,000
	Kiosk panels and materials	\$2,500 each	16 panels	\$40,000
	Web-based interpretive tour	Staff time and web site costs		\$10,000
	Cedar Creek stormproofing	Contract funds from fire settlement		\$50,000
Subtask	12.3 Invasive Species Removal			\$339,000
	APHIS – Invasive Species Removal	Materials, staff time, vehicle costs		\$274,000
	Materials	Trapping equipment		\$10,000
	Consultant	\$100/hour	300 hours	\$30,000
	USFS Staff	\$50/hour	100 hours	\$5,000
	USFS Crew	\$25/hour	800 hours	\$20,000
Task 12 Total				\$2,636,000

Project 12: Sweetwater Reservoir Wetlands Habitat Recovery

Local Project Sponsor: Sweetwater Authority (SWA)

Partners: California Conservation Corps and Urban Corps of San Diego County

A project summary budget table consistent with Table 8 in the PSP is provided below as **Table 4-31** for the *Sweetwater Reservoir Wetlands Habitat Recovery* project. The project has a 53% funding match.

Table 4-31: Total Project Budget for Sweetwater Reservoir Wetlands Habitat Recovery

Proposal Title: San Diego 2015 IRWM Implementation Grant Proposal					
Project Title: Sweetwater Reservoir Wetlands Habitat Recovery					
Project serves a need of a DAC?:		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Funding Match Waiver request?:		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		
		(a)	(b)	(c)	(d)
Category		Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Sources*	Total
(a)	Direct Project Administration	\$30,000	\$40,480	\$0	\$70,480
	Task 1: Project Management	\$15,000	\$25,680	\$0	\$40,680
	Task 2: Labor Compliance Program	\$5,000	\$5,000	\$0	\$10,000
	Task 3: Reporting	\$10,000	\$9,800	\$0	\$19,800
(b)	Land Purchase/ Easement	\$30,000	\$41,000	\$0	\$71,000
	Task 4: Land Purchase	\$30,000	\$41,000	\$0	\$71,000
(c)	Planning/ Design/ Environmental	\$232,000	\$387,909	\$0	\$619,909
	Task 5: Feasibility Studies	\$0	\$0	\$0	\$0
	Task 6: CEQA Documentation	\$15,000	\$167,786	\$0	\$182,786
	Task 7: Permitting	\$47,000	\$24,444	\$0	\$71,444
	Task 8: Design	\$160,000	\$191,179	\$0	\$351,179
	Task 9: Project Performance Monitoring Plan	\$10,000	\$4,500	\$0	\$14,500
(d)	Construction/ Implementation	\$1,208,000	\$1,254,240	\$0	\$2,462,240
	Task 10: Contract Services	\$8,000	\$6,240	\$0	\$14,240
	Task 11: Construction Administration	\$40,000	\$30,320	\$0	\$70,320
	Task 12: Construction/Implementation	\$1,160,000	\$1,217,680	\$0	\$2,377,680
	12.1: Mobilization and Site Preparation	\$90,000	\$50,856	\$0	\$140,856
	12.2: Project Construction	\$1,070,000	\$1,166,824	\$0	\$2,236,824
(e)	Grand Total	\$1,500,000	\$1,723,629	\$0	\$3,223,629
*List sources of funding: Funding match will be from TransNet EMP (\$100,000 for Task 12.2), FEMA (\$13,840 for Task 12.2), and Sweetwater Authority (\$1,609,789 for All Tasks).					

Row (a) Direct Project Administration Costs

All lump sum contractor costs provided are based upon bid estimates provided to SWA in 2015.

Task 1: Project Administration

Costs for project administration include time to complete administrative duties. A SWA Biologist will dedicate 252 hours to this task with a rate of \$140. A contractor will dedicate 54 hours at a rate of \$100. Hourly rates were calculated based on salary plus benefits, and no overhead is included.

Task 2: Labor Compliance Program (LCP)

SWA will hire a contractor to complete labor compliance for the HRP. It is estimated that a contractor will require \$10,000 for this task.

Task 3: Reporting

Cost for reporting will include time to complete reporting duties. A SWA Biologist will dedicate 60 hours to this task with a rate of \$140, and a SWA Assistant Biologist will dedicate 120 hours with a rate of \$95. Twelve quarterly project status reports are budgeted. Total costs for Task 3 are \$19,800.

Row (b) Land Purchase/ Easement

Task 4: Land Purchase

Task 4 costs include \$20,000 for preparation of a Record Survey by a contractor (licensed surveyor); \$28,400 for preparation of a Recorded Conservation Easement by a SWA Biologist (60 hours at \$140/hr) and a contractor (legal services; 200 hours at \$100/hr); and \$22,600 for a Property Analysis Record by a contractor (226 hours at \$100/hr). Total costs for Task 4 are \$71,000.

Row (c) Planning/ Design/ Engineering/ Environmental Documentation

Task 5: Feasibility Studies

The *Habitat Recovery Plan for the Sweetwater Reservoir Wetland Habitat Recovery Project* (2011) was completed prior to January 1, 2011 and is therefore not included in this budget.

Task 6: CEQA Documentation

Costs associated with preparing CEQA documentation include actual costs (environmental consultant services) necessary to complete the Mitigated Negative Declaration (MND) and supporting studies for the project and total \$166,786. Costs to prepare the MND Addendum include those for a SWA Biologist with a rate of \$140 dedicating 60 hours and a SWA Assistant Biologist with a rate of \$95 dedicating 80 hours. Total costs are \$182,786.

Task 7: Permitting

Costs for Permit Application and Facilitation include \$19,080 for a contractor, costs for a SWA Biologist with a rate of \$140 dedicating 77 hours, and an Assistant Biologist with a rate of \$95 dedicating 58 hours. Costs for Habitat Management Program Update include those for a SWA Biologist with a rate of \$140 dedicating 60 hours and an Assistant Biologist with a rate of \$95 dedicating 24 hours. Costs for Pre-Construction Bio Surveys include \$2,000 for a contractor, along with costs for a SWA Biologist (\$140/hr dedicating 24 hours) and an Assistant Biologist (\$95/hr dedicating 24 hours). Costs for Pond Turtle Clearance and Reintroduction include \$2,240 for a contractor, and costs for a SWA Biologist with a rate of \$140 dedicating 16 hours. Costs for the SWPPP include \$7,780 for a contractor, along with costs for a SWA Biologist (\$140/hr dedicating 4 hours), an Assistant Biologist (\$95/hr dedicating 8 hours), and an Engineering Manager (\$170/hr dedicating 4 hours). Total costs for Task 7 are \$71,444.

Task 8: Design

Costs associated with 90% Design include actual costs necessary to complete the original design and construction plans and specifications for the project and total \$261,459. Costs to prepare the revised (scaled down) Final Design include those for SWA staff to complete work, including 16 hours for an Engineering Manager (\$170/hr), 16 hours for an Engineering Inspector (\$110/hr), 32 hours for a Biologist (\$140/hr), and 8 hours for an Assistant Biologist (\$95/hr). Total costs for Task 8 are \$351,179.

Task 9: Project Performance Monitoring Plan

Costs associated with preparing a Project Performance Monitoring Plan include \$10,000 for a contractor and 24 hours for a SWA Biologist with a rate of \$140 and 12 hours for an Assistant Biologist with a rate of \$95 to prepare the Plan. Total costs for Task 9 are \$14,500.

Row (d) Construction/Implementation

Task 10: Contract Services

Costs for Preparing the Bid Packages include a SWA Biologist (\$140/hr) dedicating 12 hours, an Engineering Manager (\$170/hr) dedicating 8 hours, and Clerical staff (\$80/hr) dedicating 6 hours. Costs for Advertisement include \$4,000 in materials and costs for Clerical staff (\$80/hr) dedicating 6 hours. Costs for Bid Opening and Evaluation include a SWA Biologist (\$140/hr) dedicating 12 hours and an Engineering Manager (\$170/hr) dedicating 12 hours. Costs for Bid Award-NTP-Bonding include a SWA Biologist (\$140/hr) dedicating 4 hours, an Engineering Manager (\$170/hr) dedicating 4 hours, and Clerical staff (\$80/hr) dedicating 16 hours. Total Task 10 costs are \$14,240.

Task 11: Construction Administration

Costs for Construction Management include a SWA Engineering Manager (\$170/hr) dedicating 60 hours, 48 hours for an Engineering Inspector (\$110/hr), and 12 hours for Clerical staff (\$80/hr). Costs for Engineering Services/Inspection include \$12,000 for a contractor, a SWA Engineering Manager (\$170/hr) dedicating 60 hours, and 288 hours for an Engineering Inspector (\$110/hr). Total Task 11 costs are \$70,320.

Task 12: Construction/Implementation

Construction activities will involve mobilization and site preparation, construction, and post-construction monitoring and maintenance of the HRP. Post-construction monitoring and maintenance will extend beyond the IRWM funding period, and includes biological monitoring and maintenance of the restoration site.

Subtask 12.1: Mobilization and Site Preparation – contractor costs for a number of pre-construction activities, administrative and field, that include pre-construction meetings, workers' education, site delineation and protection, plant materials salvaging and staging, large tree removal and off site temporary storage, and pond dewatering.

Subtask 12.2: Project Construction – contractor costs and materials for all construction activities including environmental monitoring, river crossing road demolition, clear and grub vegetation, mass grading, erosion control and best management practices, soil preparation, river crossing bridges, irrigation materials and installation, irrigation water (up to two years so it continues as a post-construction activity), train information kiosk, container plants and cuttings, plant installation, seed, and hydroseed application. This task includes demobilization.

Table 4-32: Task 12 Costs for Sweetwater Reservoir Wetlands Habitat Recovery

	Deliverables/Activity	Hourly Rate/Unit Cost	Number of Hours/Units	Total Cost
Subtask 12.1: Mobilization and Site Preparation				\$140,856
	Pre-Construction Meetings/Education	Contractor and SWA Labor		\$16,880
	Site Delineation and Protection	Contractor and SWA Labor		\$26,820
	Plant Materials/Salvage/Staging	Corps and SWA Labor		\$36,420
	Large Tree Removal/Transplant	\$538 each	72	\$38,736
	Pond Dewatering	Contractor Service		\$22,000
Subtask 12.2: Project Construction				\$2,236,824
	Environmental monitoring	Contractor and SWA Labor		\$69,000
	River Crossing Road Demolition	\$81/LF	900 LF	\$72,900
	Clear and Grub Vegetation	\$646/ac	36 ac	\$23,256
	Mass Grading	\$3.23/cy	180,000 cy	\$581,400
	Erosion Control and BMPs	\$2,268/ac	44 ac	\$99,338
	Soil Preparation	\$1,415/ac	30 ac	\$42,450
	River Crossing Bridges	Materials and Contractor Labor		\$400,000
	Irrigation Materials, Installation, Water	Contractor, Corps, SWA Labor		\$378,000
	Trail Information Kiosk	Materials and SWA Labor		\$9,780
	Container Plants and Cuttings	\$2 each	125,580	\$251,160
	Plant Installation	Corps and SWA Labor		\$109,680
	Hydroseed Application and Seed	Contractor Service, 1,410 lbs seed		\$199,860
Task 12 Total				\$2,377,680

Project 13: Hodges Reservoir Natural Treatment System

Local Project Sponsor: City of San Diego

Partners: Santa Fe Irrigation District, San Dieguito Water District, San Dieguito River Valley Conservancy, and San Diego County Water Authority (SDCWA)

A project summary budget table consistent with Table 8 in the PSP is provided below as **Table 4-33** for the *Hodges Reservoir Natural Treatment System* project. This project will provide a 25% funding match.

Table 4-33: Total Project Budget for Hodges Reservoir Natural Treatment System

Proposal Title: San Diego 2015 IRWM Implementation Grant Proposal					
Project Title: Hodges Reservoir Natural Treatment System					
Project serves a need of a DAC?:		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Funding Match Waiver request?:		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		
		(a)	(b)	(c)	(d)
Category		Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Sources*	Total
(a)	Direct Project Administration	\$0	\$318,400	\$0	\$318,400
	Task 1: Project Management	\$0	\$224,200	\$0	\$224,200
	Task 2: Labor Compliance Program	\$0	\$1,800	\$0	\$1,800
	Task 3: Reporting	\$0	\$92,400	\$0	\$92,400
(b)	Land Purchase/ Easement	\$0	\$0	\$0	\$0
	Task 4: Land Purchase	\$0	\$0	\$0	\$0
(c)	Planning/ Design/ Environmental	\$220,000	\$548,008	\$0	\$768,008
	Task 5: Feasibility Studies	\$0	\$161,408	\$0	\$161,408
	Task 6: CEQA Documentation	\$0	\$327,000	\$0	\$327,000
	Task 7: Permitting	\$0	\$50,000	\$0	\$50,000
	Task 8: Design	\$220,000	\$0	\$0	\$220,000
	Task 9: Project Performance Monitoring Plan	\$0	\$9,600	\$0	\$9,600
(d)	Construction/ Implementation	\$2,666,472	\$98,000	\$0	\$2,764,472
	Task 10: Contract Services	\$0	\$25,000	\$0	\$25,000
	Task 11: Construction Administration	\$300,000	\$0	\$0	\$300,000
	Task 12: Construction/Implementation	\$2,366,472	\$73,000	\$0	\$2,439,472
	12.1: Pre-Construction/Site-Preparation	\$40,000	\$53,000	\$0	\$93,000
	12.2: Wetlands Construction	\$2,268,972	\$0	\$0	\$2,268,972
	12.3: Post-Construction	\$50,000	\$20,000	\$0	\$70,000
	12.4: Public Outreach	\$7,500	\$0	\$0	\$7,500
(e)	Grand Total	\$2,886,472	\$964,408	\$0	\$3,850,880
*List sources of funding: Funding match will be provided by in-kind services and capital funds from the City of San Diego, Public Utilities Department.					

Row (a) Direct Project Administration

Task 1: Project Management

Costs for project management include time to complete administrative duties. For preparation of invoices and internal project management, City staff will dedicate 978 hours with an hourly rate of \$120. For project partner deliverables and coordination, City staff will dedicate 890 hours with an hourly rate of \$120. Hourly rates were calculated based on salary plus benefits, and do not include overhead.

Task 2: Labor Compliance Program (LCP)

The City will ensure the existing LCP is managed for this project. Minimal City staff budget (15 hours of City staff at a rate of \$120) is included here for coordination with the City's LCP manager.

Task 3: Reporting

Cost for reporting will include time to complete grant reporting duties. City staff will dedicate 770 hours to this task with an hourly rate of \$120.

Row (b) Land Purchase/ Easement

Task 4: Land Purchase

Not applicable.

Row (c) Planning/ Design/ Engineering/ Environmental Documentation

Task 5: Feasibility Studies

Costs associated with this task include costs necessary to complete the two key elements of the project definition, which include a technical memorandum and a hydrologic model. Both efforts are underway and are being completed by consultants, with a contract cost of \$79,408 for the technical memorandum and \$82,000 for the hydrologic model. Total Task 5 costs are \$161,408.

Task 6: CEQA Documentation

CEQA elements will include initial consultation with stakeholders and agencies and preparation of a Hydrology and Water Quality Analysis, a Biological Assessment, a Noise and Aesthetic Evaluation, and finally preparation of a Mitigated Negative Declaration. CEQA Documentation costs are estimated at \$327,000.

Task 7: Permitting

Work in this task includes time required to obtain all permits listed in the Work Summary. Total costs are anticipated to be \$50,000 for this effort based on the City's previous experience obtaining permits.

Task 8: Design

Work in this task includes the consulting fees for the preparation of a topographic survey (\$40,000), as well as the final design (\$150,000) with all the required plans and specifications (\$30,000). These costs are based on consultant cost estimates.

Task 9: Project Performance Monitoring Plan

Cost for this task includes time for development of the PPMP by City staff for a total of 80 hours at an hourly rate of \$120.

Row (d) Construction/Implementation

Task 10: Contract Services

Costs associated with construction contracting include time for City staff to issue bids and award a final contract. City staff will dedicate 208 total hours to this task with an hourly rate of \$120.

Task 11: Construction Administration

Costs for construction administration include inspections, permitting review, storm water compliance, coordinating construction activities, task and time management, and coordination with City of San Diego planners and engineers. From previous experience, the construction management cost is estimated around 13 percent of construction costs, for a total of \$300,000.

Task 12: Construction/Implementation

Costs for construction include costs for materials, equipment, and labor for mobilization, installing the project components, conducting outreach, and completing demobilization and post-construction work. Costs are based upon engineering estimates from the City based on implementation of similar projects and consultant estimates and total \$2,439,472.

Table 4-34: Task 12 Costs for Hodges Reservoir Natural Treatment System

	Deliverables/Activity	Hourly Rate/Unit Cost	Number of Hours/Units	Total Cost
<i>Subtask 12.1: Pre-Construction/Site-Preparation</i>				<i>\$93,000</i>
	Activities for site work	\$68,000	Contracted	\$68,000
	Staff of partner agencies deliverable review	Variable	100	\$15,000
	Site visits and surveys	Variable	75	\$10,000
<i>Subtask 12.2: Construction</i>				<i>\$2,268,972</i>
	Constructed wetland system	Estimated based on planning level cost estimates for wetlands and scaled to appropriate size		\$2,024,972
	Control building(s)	\$200/sq ft	350 sq ft	\$70,000
	Fencing	\$500/LF	10 LF	\$5,000
	Yard piping	\$15/LF	5000 LF	\$75,000
	Flow meters	\$3000/meter	2 meters	\$6,000
	Pump installation	\$250/unit	80 units	\$20,000
	Pump station piping	\$1000/unit	60 units	\$60,000
	Electrical installation	\$400/unit	20 units	\$8,000
<i>Subtask 12.3: Post-Construction</i>				<i>\$70,000</i>
	Demobilization	\$250/hr	200 hours	\$50,000
	Inspections	\$250/hr	80 hours	\$20,000
<i>Subtask 12.4: Public Outreach</i>				<i>\$7,500</i>
	Public Outreach – City staff	\$120/hr	63 hours	\$7,500
Task 12 Total				\$2,439,472